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THE

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and Civilian.

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ARTICLE I.

Social and Commercial Aspects.

THE social and moral developments of the nineteenth century suggest a variety of topics worthy of investigation. Full of instruction if observed in a philosophic light, they commend themselves to the observation and study of all men who desire to comprehend the true character of the times in which they live.

The social economy of the more enlightened nations is in a state of transition, and if we desire to avoid the evils and avail ourselves of the benefits which may result from the changes going on, we should observe the phenomena as they occur, and, if practicable, learn to interpret their meaning.

From a momentary view of the social aspects, it will be perceived that freedom of thought, self-confidence, and less veneration than in former times for long established institutions and doctrines, are distinguishing traits in the character of the present generation.

And though it may be doubted by some, whether these features of the times betoken good or evil, it must be admitted that they are the necessary precursers of a more enlightened and higher state of civilization. The consequences of these developments will doubtless be modified by the social condition and peculiar temperament of individuals and nations.

In Europe, freedom of thought and the moral courage which it imparts, prepare the minds of men for political revolutions, but revolutions being full of peril, and not always practicable, men choose expatriation rather than submission to unjust institutions. Hence, we perceive the source of the mighty tide of emigration flowing from Europe to the shores of our own continent. This must be regarded as the most remarkable, and in many respects

the most important social movement of the age. Several years elapsed after the commencement of this movement before its effects could be correctly observed or appreciated, but its agency in developing the resources of the country, and in expanding our commerce, is becoming daily more apparent.

Without the labor of these emigrants, it would be utterly impracticable to carry out our immense systems of public improvement in a reasonable time; for the number of operatives required for this purpose, if taken from agriculture, would raise the prices of labor and provisions to rates that would bring embarrassment to every department of industry, and put an end to the construction of railroads. But with a continual supply of labor from other countries, the Western States, by the exercise of a reasonable degree of prudence, will be able to prosecute their public works with sufficient expedition, and escape the revulsions which have been occasioned by enterprises of like nature in other countries. And, in the meantime, agriculture instead of being impeded, will expand its operations, and find a better market for all its products.

But in addition to all this, the demand for iron created by the construction of railroads, and the scarcity of mining operatives in Great Britain occasioned by emigration, have given an impetus to its production in this country, that will enable us before the expiration of many years to control the iron trade at home and probably throughout the world.

Nor should we overlook the handycraftsman, whose wares we have been consuming, and to whom in return we have been sending bread and provisions across the Atlantic.

By transferring his art and implements of trade to this country he saves to producers and consumers the cost of exchanging commodities at a distance of several thousand miles, aids in building up cities and a home market for our agricultural products, and lessens our dependence on the industry of other nations.

But there is still a broader view of this subject: the railroad from the Mississippi to the Pacific must be built chiefly by the labor of emigrants; and we may add, that without their aid it is scarcely probable that this enterprise could be carried on successfully during the existence of the present generation.

It is a curious and interesting fact that the people of Europe should voluntarily become the instruments of developing the resources of this country; that they should contribute in so great a

degree to the construction of railroads calculated to unite the people and strengthen the bonds of union between the States; open our mines; build up manufactures, and extend our commerce westward to the shores of the Pacific, and thence to Asia. No friend, no enthusiastic lover of this country and its institutions, could have devised a scheme better calculated to advance the grandeur of the nation, and establish upon a broad and permanent basis its political and commercial supremacy.

While Great Britain is extending her commerce east by military power and civil oppression, individuals, born her subjects, are assisting to raise up a rival in the west destined to meet her upon the opposite side of the globe, and by the arts of peace win the laurels for which she has been fighting for more than a century. Truly, the ways of Providence are wonderful, and the councils of rulers folly. The policy of certain governments in Europe designed to perpetuate unjust institutions, is operating with signal effect in developing the physical resources and moral power of the United States.

When the laboring classes of Europe contrast their condition with that of the people of this country, and perceive no ground to hope for improvement, their veneration for the land of their birth and for the institutions which oppress them, is weakened; a sense of individuality is awakened, and feelings of manhood aroused, which urge them to seek a home in other lands where the rights of men are equal, and the pursuit of happiness is open to all. Many years may elapse before the consequences of this movement are fully developed, but in addition to those already noticed there are others not less interesting which may be regarded as almost certain. In a social point of view, we conclude that the condition of the masses in Europe—the people as distinguished from the rulers and privileged orders—will be greatly improved by the operation of the causes enumerated.

For it may be regarded as an axiom that, when an enlightened people possess sufficient independence of mind to judge of the institutions under which they live by the effects produced upon the happiness of the community, the government, whatever be its nature, must conform to their wants and opinions.

The nature of the social consequences in this country admit of more doubt than in Europe. The danger here is in the excess of the progressive element, and this excess is annually augmented by

imigration; for individuals of mature years, in whose nature the conservative principle predominates, rarely abandon the soil of their birth, and the institutions under which they have been reared, to seek their fortunes in strange lands. Hence we observe that the immigrants to this country generally affiliate with the progressive party. This is a fact which should be borne in mind by the statesman and by the people in general, and cause them to be more circumspect in the adoption of new measures. For though the progressive element be necessary to give energy to a people, and to prevent the government and wealth of a country from falling into a few hands, yet, when this element is found to exist in excess, it leads to aggressions upon the rights of other nations, and to speculations in property, politics and religion.

The traits which we have noticed as characterizing the times, are prominent in the aspects of morals and religion. But it is to be deprecated that freedom of thought, one of the highest privileges of man, indicates a strong tendency to licentiousness; that self-confidence is leading to fanaticism; and that, owing to the want of veneration for the teachings of christianity, religious absurdities at war with the common sense, and even with the common decencies of a civilized people, are propagated with zeal, and adopted with avidity.

We respectfully commend these phenomena to the observation and study of those who have assumed the responsible office of teachers of the sublime truths of christianity. Let these things incite them to greater diligence in their vocation. It may be, the fault is theirs. They may have insisted too much upon a belief in dogmas inconsistent with the lights of the age. They may have neglected to fortify and inforce sacred truths by evidence drawn from the economy of the physical and moral nature of man, and from his relations to the universe. Have they not clothed religion with a mantle of gloom, and taught that she demands sacrifices in conflict with individual interests and social enjoyments? Have they labored to reconcile philosophy and religion, and to show that, so far from being twain, the truths of the one are those of the other, and that their united lights and combined influence are necessary to elevate the individual and social condition of man to that happy state designed to be established by the christian dispensation?

Never has there been a time so favorable for extending the area of christianity as now. We are entering upon a full tide of com-

merce with the Isles and with the great Orient of the ancients; a commerce which in volume will surpass that carried on by the merchant princes of Tyre, as far as the volume of the Mississippi surpasses that of the Euphrates. By this means the Caucassian and Mongolian races, the christian and the pagan, will be brought into social contact. And hence the privilege and duty of christianizing Asia is about to devolve upon the American people.

In view of these facts, may we not conclude that we are entering upon a great crisis in the history of civilization, an era when the old system having performed its office, and exhausted its powers, is about to give place to a new order?

In this glance at the social aspects of the times, while we find evils to deprecate, we still discover what are conceived to be good grounds for the conclusion that the great elements of civilization are still in the ascendant.

The principles of civil liberty are gaining strength; the exhibitions of licentiousness which occur, seeming at times to endanger the purity and permanency of our institutions, like succulent shoots, are evidences of the richness of soil and vigorous condition of the plant from which they spring. In communities where a majority of the people are prosperous, conservative principles must prevail. Wealth is a conservative element under all forms of government, and even the restless and unprincipled innovator, if successful in his schemes, settles down into a state of the most obstinate conservatism. Public improvements calculated to improve the means of social intercourse, and facilitate the exchange of commodities, are also to be classed with the conservative elements of nations. A sense of national grandeur, though it may lessen respect for the people of other countries, is nevertheless a potent element in sustaining the institutions of the country to which men belong.

If we bear these principles in mind while taking a view of the vast resources of this country, the facilities which it affords for the acquisition of wealth, the spirit and the means of public improvement which we possess, and the rapid strides which we are making towards national greatness, we shall find little cause to distrust the permanency of our institutions, until we shall have reached, and perhaps surpassed, the grandeur of every other nation whether ancient or modern.

But the elements enumerated are to be regarded as accidental, arising from the physical condition of the country and from the peculiar characteristics of the race to which we belong. They are but the gross materials constituting the framework of our institutions, liable to change and decay, unless preserved by principles imperishable in their nature. To make our institutions perpetual, moral improvement must keep pace with the progress of physical science, with the acquisition of wealth, with the expansion of commerce, with the enlargement of territory, with increase of population.

This is the point which must finally determine our destiny as a people. The inherent energies of our race will develop our physical resources, and extend the area of our institutions. But it requires enlightened, energetic and unceasing exertions on the part of the statesman, philosopher and divine, to develop the moral elements which are essential to sustain a perpetual state of progress.

The statesman must look to the means necessary to ensure the education of the destitute, that to the equal rights to which men are entitled by birth there may be added equal opportunities of comprehending the duties which each individual is bound to observe and perform as a member of the community. Else how can he enact laws to punish the delinquences of those who may fall into crime by reason of their ignorance without violating the eternal principles of natural justice?

The philosopher must study the individual man, investigate his social and moral natures, and, observing their phenomena, deduce thence his duties and the true objects for which he was created.

In the exercise of his functions, the teacher of religion should continually bear in mind, that christianity is a social institution, designed by its founder to bind the whole human family together by social love instead of human laws, and that future rewards depend chiefly upon the performance of social duties under the influence of this sublime principle.

Should our readers object to the introduction of these grave topics in a work relating chiefly to the industrial pursuits and business affairs of men, we beg to remind them that happiness is the end proposed to be attained by each and every pursuit adopted by man. But if, while engaged in their respective vocations, they neglect to observe the social aspects, and allow political errors and social vices to grow up and gain strength, they will fail in the at-

tainment of the chief object for which all men labor. An enlightened community possessing sound morals, and a free government wisely administered, are necessary elements of individual prosperity. They encourage habits of industry by making its rewards more certain, and enhance the value of those rewards by combining social with physical enjoyments. They make sure to the laborer the fruits of his toil, and protect his accumulations for the benefit of his offspring, and hence ethics and the science of government are to be regarded as legitimate branches of political economy.

ARTICLE II.

A New Plan of Constructing Railroads.

No suggestion touching improvements in traveling which have come under our observation has afforded us more pleasure than those contained in the following article. We know that one not a machinist or an engineer is liable to be deceived in such matters; but the plan proposed by the writer for constructing railroad tracks and machinery with a view to the greater capacity of both, seems so plain that we scarcely feel a doubt of its success in all respects, except in the point of reasonable safety, at a speed of one hundred miles per hour. Indeed so high a rate of speed can hardly be desirable. If with the improvements proposed a speed of fifty miles an hour can be attained and kept up with safety through the whole line from the Mississippi to the Pacific, we think the most ardent progressive in the land ought to be content.

At the first view, the additional cost may seem to be an objection, but this will not prevent the adoption of the plan upon all great lines of travel in case the author's views should be realized.

We trust, Mr. Robinson will be able, in some way, to make a satisfactory test of his invention, before the railroad to the Pacific is commenced; and if such a test can not be made by individual means, we would suggest that Congress be applied to for an appropriation for that object.—*Sr. Ed.*

LOUISVILLE, November 25, 1853.

MY DEAR SIR: In my last, I promised you an explanation of the plan I had previously suggested to you for improving the speed, safety, and comfort of railroad traveling. Knowing the interest

you feel, as a public spirited man, in all legitimate works of public improvement, and particularly in the great project of a railroad to the Pacific ocean, and feeling confident of your ready appreciation of any plan for the construction of that road which will combine desiderata absolutely necessary to its prompt and speedy completion, as well as to its safe and successful operation when completed, I have the more readily promised this, as I consider the plan peculiarly fitted for this road, and upon a scale fully commensurate with its importance. The want of the desiderata referred to, although felt upon all of our long main lines, must be more seriously felt upon that than any other, precisely in proportion to its length and the primitive state of the country through which it must pass. The conditions, which every practical railroad man must concede as necessary to enable this road to triumph, *in our generation*, over all the difficulties in the way of its construction, and regular, systematic, and successful operation, are: 1st. Great, increased speed, with at least the same safety as at the present rates. 2d. Greatly increased safety. 3d. Increased capacity, with accommodations and comforts for travelers far beyond any that can possibly be obtained on our present roads. And all these conditions must be obtained with a durable and substantial road-bed upon "terra firma." By the method I have suggested, the very elements, out of which ony one condition is complied with, are the elements out of which all others are fulfilled, and there can be no question as to obtaining the following results, viz: The easy attainment of a speed of one hundred miles per hour, increased safety, even almost to the extent of absolute immunity from derailment, by reason of unseen imperfections in the track, and from the breaking of axles, increased accommodations and conveniences, even to the extent of sleeping rooms, eating rooms, sitting rooms, and all the comforts which may be had upon our steamers. This, at first, may seem rather a startling proposition, but is it half as startling as was deemed the first proposition of running a locomotive engine at a speed of ten miles an hour? It will be remembered that a noble English gentleman agreed to *eat* the first engine which should ever accomplish this speed. With all that has been accomplished since that time, I am yet unable to sit quietly down in the conclusion that perfection has been attained in the manner of constructing railroads and railroad machinery, but I have faith to believe that as many and as great improvements are yet to be made as have been made since the "Rocket" made her first memorable trip.

Both theoretically and practically, the obstacles which prevent a speed of one hundred miles per hour upon our present roads are sufficiently obvious. It is an indisputable fact that, in order to increase the speed of locomotive engines, increased diameter of driving wheel is necessary, and then increased boiler or evaporating surface is necessary to create power for these large wheels.

Granting that this increased power could be obtained to the extent required for a speed of one hundred miles per hour, it is manifest that, with driving wheels of the proper size, say ten to twelve feet in diameter, engines upon the ordinary general plan of construction would be so high, in proportion to their base, that the speed would be unsafe. The speed would be unattainable for the reason that the engine could not be kept upon the track. Absolute perfection in a railway track is not to be attained, or, if it was, it could not be maintained. The crushing of the timber under the rails, the giving away and settling of the joints, the settling of the earthwork, the crushing and wearing of the rails; all these are contingencies not to be avoided, and occurring more or less, as the materials are better or worse out of which the road-bed and tracks are constructed. With our best railways thoroughly balasted, with the cleanest gravel and the best materials throughout, these difficulties occur in every rod, and a speed of one hundred miles per hour would not be safe, even if the requisite wheels and power could be obtained. But the power cannot be obtained to the required extent for any *useful service* upon the ordinary gauge of road.

These difficulties would naturally bring us to the conclusion that a wider gauge is necessary. Increased width would of course give more space for boiler, would admit larger wheels without raising the center of gravity, and would thus permit increased speed with safety. That is to say, the inequalities and imperfections of the track remaining the same, a higher rate of speed would be allowable and attainable upon a wide than upon a narrow gauge. This theory, however, only applies, in its fullest extent, upon a straight line of road. An increase of gauge brings up other difficulties; viz: increased friction upon curves, increased tortion of axles, increased wear and tear of road by reason of the necessarily increased weight of engines, &c.; and all these without attaining advantages of speed, safety, capacity, and convenience to the extent required. I consider any material increase of gauge, therefore, inadmissible, although I consider an increase of base an absolute condition in obtaining these advantages.

To establish the assertion I have made with regard to the limit of speed of engines with limited drivers, I beg to state the results of experiments made in England within a year or two past, with an engine constructed upon the most approved proportions, having drivers seven feet in diameter. I have not the published statement at hand, but the experiments were first upon a cold inclement day, a wet rail, with an unfavorable wind, and under circumstances entirely at variance with the necessary conditions for making high speed. The result was seventy-one miles per hour, the engine having a surplus of steam and "blowing off" all the time. A few days subsequent to this it was again taken out, under what were considered the most favorable circumstances, fair weather, dry

rail, and no wind. The result was precisely the same, a speed of seventy-one miles per hour, and with no apparent difference in the amount of surplus steam. The conclusion is irresistible: The speed of the engine was not limited by outside conditions of track or weather, but depended entirely upon something inherent in the engine itself—the absolute incapacity of the pistons and connections to move any faster—the inability of the steam to enter the cylinders and exhaust with any greater rapidity. It follows therefore that had the engine been constructed with larger driving-wheels, it would have had capacity for a higher rate of speed, for there was no difficulty experienced in generating steam. But it is questionable whether with the increased drivers and the consequently increased height of boiler, it would have been compatible with safety to have driven it even at so great a speed as seventy-one miles per hour. It may not, therefore, be impossible to manufacture an engine, *simply as an experiment*, which could be driven at a speed of *perhaps* one hundred miles per hour, provided the *condition* of the *track* did not present insurmountable difficulties—These I have before referred to. To a certain extent they are unavoidable, and the motion, both vertical and lateral, thereby created will always present an insuperable obstacle to any great increase of speed upon the ordinary gauges, even if *power* for *useful purposes* could be obtained. The most perfect track if examined critically will show a succession of vertical curves by settling at the joints, even if depressions are found at no other points. These low points, if equally depressed, when opposite, create a vertical motion only, and when laid alternate or not opposite, create a lateral or vibratory motion still more inconsistent with high speed. It is found that in consequence of the loose nature of the material near the sides of the road bed the harder and more compact material in the center becomes a fulcrum upon which the track vibrates, and where a depression is found in one rail, a corresponding elevation is very generally found in the *opposite* one. This is more particularly the case where the joints of the rails are laid alternately. There is, then, at the centre a *neutral point* where there is no disturbance. Could a load be sustained at this point, it is evident that no motion under such conditions would be communicated to it, or, taking the worst feature, viz: a settling of one rail without the corresponding elevation in the other, and it is evident that but one *half* as much disturbance occurs at the *centre* as at the depressed rail. Under the present mode of construction, the car-bodies and their loads are sustained at points nearly over each rail, and, as a necessary result, a disturbance of the level of the track causes a disturbance of the level of the car and its load. The higher and wider these are, the greater and more dangerous is the motion.

Now, if a car-body be sustained by a single point only at the centre of each of the trucks under it, and this car-body be of suf-

ficient width to extend out on one side projecting beyond the rails far enough to be sustained by another truck having another bearing at its center only, either of these trucks might be disturbed in its level by a depression in one rail and a corresponding elevation in the other, without in the least disturbing the level of the car-body. It is precisely upon this principle that I have designed a road. I propose to lay four parallel rails of the ordinary pattern and weight, forming two distinct tracks, each of a gauge of two and a half to three feet, and having an intermediate space of five to six feet. These tracks I propose to lay upon distinct and separate sleepers, having a trench or ditch between them, but to connect them by ties of iron or other suitable material so as to preserve a uniform gauge in the intermediate space. I propose to construct narrow trucks for each track and rest each car-body upon four trucks sustained by a single bearing only at the center of each. It is perfectly evident that the car-body and its load would have no vibratory motion communicated to it by the inequalities incidental to each independent track, and that its level could not be seriously disturbed, unless one track should be absolutely lower than the other. Against this latter contingency we have a base of twelve feet for a car no higher than is now used upon a base of less than five feet. By an arrangement of this kind, the friction upon curves is greatly reduced (for we have only a gauge of two and a half or three feet,) the vibration and tortion of the axles is lessened, while, at the same time, the capacity of the axles to resist all strains is immensely increased, and yet we have the indispensable condition required for high speed, a wide base. Thus are combined all the advantages ever claimed for a wide gauge with all the advantages that can possibly be claimed for the narrow gauge, and yet all the disadvantages ever urged by the respective champions of either, as belonging to the other, are entirely avoided.

I propose also a peculiar system of laying these four rails, and that is with the joints of the outside ones opposite each other, but alternated with the joints of the inner rails, which shall also be opposite each other. It will be perceived that by this system each independent track is laid with alternate joints, but always occupying the same relative position with the joints of the opposite track. The inevitable depression of the joint causing a corresponding elevation of the opposite rail at its center, the middle of each track or the half way point between the two rails is a neutral point where there is no motion, and the inequalities of each track are such that the opposite trucks are either inclined toward each other or from each other at precisely the same moment, thus counteracting each other and avoiding both the vertical and lateral movement of the car-body caused upon an ordinary road by either opposite or alternate joints.

There would be, of course, a tendency of these centre bearings

upon which the car-body rests to approach each other or recede from each other as the inclinations of the tracks should be inwards or outwards. The simple apparatus used in all well-constructed car trucks provides fully for this tendency, permitting the truck to move a short distance laterally or to incline without moving the center bearing at all. Upon curves where it is now found necessary to incline the cars by raising the outer rail, so much as oftentimes to create alarm among the passengers, the level of the car-body may be perfectly preserved and the object fully gained by inclining each distinct track, but keeping the center always upon a level. I propose to connect opposite trucks in such a manner that one shall act as a guide for its mate. The most dangerous causes of derailment are not great obstacles extending across the track, because such obstacles, whether placed by design or accident, are to be guarded against by a suitable police, but by far the most serious danger is from unseen defects in the track itself, or, rather, in a single rail of the track, such defects as would not be apparent to the casual and careless glance of the repairer, or as could not readily be seen by the guard or engine driver of a train. A broken chair allowing the ends of the rails to slip by each other, a short and sudden crook in the rail, a worn rail with a short depression crushed in its surface, the breaking of a rail, the sudden settling of a joint under a passing load, all these are causes of derailment at high speed, and are causes, too, from which the most serious accidents may occur, because not being readily perceived, they are met with while running with entire confidence. The connection I propose would prevent any truck, meeting with such obstacles, from turning upon its center so as to leave the line of the rails without the opposite truck to which it is attached should turn also, and the probability of conditions of this kind sufficient to cause derailment, occurring upon both tracks at precisely opposite points, is so remote a contingency that I think I am warranted in claiming that the plan involves almost absolute safety.

As a general thing, the ends of the rails, it is well known, are the points where they first fail, and this simply because they are generally the lowest points. An unavoidable effect, from the manner of constructing our present roads, is, that when a wheel sinks into the depression caused by a yielding joint, the car-body receives a "cant" in that direction and the impingement upon the rail increased by the whole impetus of the load. If we keep the load still and resting upon a single point precisely in the center of each truck, it is manifest that, no matter how much the truck may be twisted or distorted out of level by the inequalities of the track, the weight is distributed alike upon all the wheels, and the joint or depression is not subjected to any greater impingement than any other part of the rail. Both rails and machinery are thus relieved, and an immense saving is made in the *most important*

item of cost in operating railways, even at a far higher than ordinary rate of speed.

It is found practicable upon all our roads to run cars constructed with a width about double that of the gauge. Taking this as a proper proportion, I consider it safe to construct cars of twenty feet width for a base of twelve feet, particularly as it is not necessary to increase the height materially. Carrying out the proportions in full, if we double the width of track, we may not only double the width of car but may also double the height, the center of gravity remaining in the same relative position. But as the height is not increased seriously, with the increased base the center of gravity is much lower than in cars of ordinary construction.— This, independent of any other consideration, would permit increased speed.

The cars may be of any length within the limit of required strength, but say, for example, sixty feet. You can readily imagine what convenience and accommodations may be provided upon cars of these dimensions, and it is perhaps unnecessary for me to make any suggestions. Sixty passengers may have comfortable sleeping accommodations in a night-car of this size, not upon shelves hung around the sides of the car but in state-rooms. More than that number could sleep in a car if arranged with berths upon the sides and with the portable apparatus used in our steamboat cabins for the center. Other cars may be finished for cooking and eating rooms. Cars for day trains may be divided into saloons and sitting rooms, with sofas, tables, &c., or may be provided with uniformly arranged seats as in our present cars. All the accommodations that can possibly be required by travelers can be had to such an extent as to render it unnecessary for them to alight between the Atlantic and Pacific. Am I not warranted, therefore, in saying that the proposed method of constructing railways and railway machinery will give ease of motion to the car; will lessen the wear and tear of both road and machinery; will largely increase the comforts and accommodations of travel; will immensely increase the capacity of the road for any kind of traffic; and will permit a speed of one hundred miles per hour with increased safety. It remains to be seen whether the proper arrangement of machinery can be had and the power generated to accomplish this speed.

I propose to construct a double locomotive, using the center space between the tracks exclusively for the boiler. There would be two distinct sets of driving wheels opposite each other — two cylinders on each side, with all the requisite machinery and trucks, forming substantially two distinct locomotive engines constructed for a gauge of two and a half to three feet, with a large and capacious boiler between them, the two sides acting entirely independent of each other, and having no connection whatever, except that they would be attached to the same boiler. The axles of the

driving wheels not extending across the space occupied by the boiler, it matters not how large the drivers are — the boiler remains in the same position, placed as near the surface of the road bed as the fire-box will permit. Immense power for propelling the large drivers is obtained by the four cylinders, and in order to supply steam, we have room for inserting a boiler of five feet in diameter if required. The fire-box, being directly in the rear of the driving wheels, may be enlarged, even to the full width of the track, and, if necessary, small auxiliary boilers may be placed between the driving wheels on each side of the main boiler. Thus are obtained all the conditions for speed—large drivers, powerful machinery, and unlimited capacity for generating steam, and, at the same time, the center of gravity is kept near the surface of the track, and the height of the engine not at all dependant upon the size of the drivers. The same principle of sustaining the load at points precisely in the centre of the tracks, as arranged in the case of the cars, may be retained in the construction of the locomotive, and the leading and trailing wheels may be connected, as a means of safety, in the same manner. The weight of engine, and also the weight of cars, is increased beyond those now in use, but the number of rails for sustaining them is proportionally increased. And this is a peculiar feature of the invention to which I wish to call your attention. In enumerating the disadvantages attendant upon an increase of gauge, I have mentioned the increased wear and tear of rails by reason of the increased weight of machinery. It might be asked—why not as well make the rails heavier? why not have two rails weighing each one hundred and twenty pounds per yard? The answer to this is—that all experience proves the durability of a rail, or its capacity to resist the action of heavy loads, not to depend so much upon the weight per linear foot, after reaching a certain limit, as upon the tenacity or adhesiveness of the particles of the iron—the rail itself may not break or bend, and yet its surface crushes and laminates under the action of heavy locomotives so as to be unfit for use, and still nearly all of the original iron is left. Nothing is added to the capacity of the iron to resist this crushing or lamination of the surface by making it heavier or stiffer. Manifestly the proper way and the only sure way to preserve the rails while increasing the weight and power of the engines is not to increase the size of the rails but to increase the number of wheels or the number of rails.

The center space between the two tracks is available for way trains running short distances made up of ordinary engines and cars—or it may be used for the repair and gravel trains of the road. For these latter the arrangement is peculiarly apt, for the ballasting may be deposited in each track where it is needed instead of being wasted upon the slopes of the embankments or in the ditches of the cuttings. At stations in large and important

towns, turnouts and branches from the narrow tracks may be constructed upon which cars propelled by horses may be used, connecting the trucking operations in these towns directly with the larger cars at any point upon the tracks. I suggest these minor matters as conveniences following directly in the wake of the construction of a road of this character. I have submitted this plan to some of the most eminent theoretical and practical railroad men in the country, both East and West, and with the exception of one single objection, it has been universally approved. It has been unhesitatingly conceded that every result I claim for it can be attained. The objection made by a few individuals is its increased cost. Let me reply to this objection with a few practical statements and I have done. The cars I propose to build are about twice the size of our present cars. If provided with the same kind of seats and no better or more luxurious accommodations they will certainly contain twice as many passengers. Having twice the number of rails and bearing points under them, we may load them twice as heavily, and may we not as cheaply construct the one car, carrying one hundred and fifty passengers, as the two cars carrying seventy-five each? If we reflect a moment, we must decide that the same capacity would be obtained for a less cost in the large cars than in the small ones. The increase is principally in the width—the same sides and the same windows that are required for the small car answer for the large one. So is it with the freight cars; if twice the size and costing twice as much per car, it is sufficient to assert that they carry twice the load. Suppose the engines each to cost twice as much as the ordinary engines, they also have twice the capacity.

For an equal amount of traffic then, the equipment cannot possibly cost any more upon this than upon any road. There would be the extra cost of two rails, with the chairs and spikes and the labor of laying them. Estimating them at 100 tons per mile at present rates, and this additional track might cost $8,500 per mile. The additional width of road bed would be about $5,000 per mile upon an average road, making a total extra cost of $13,500 per mile only, while quadrupling its capacity. I cannot consider this objection as being worthy of any serious consideration; for once demonstrate that by this plan the results I claim can be obtained, and that the Mississippi river and the Pacific ocean can be brought within eighteen hours of each other, and I say the magnificence of such an accomplishment will warrant almost any expenditure. Those who admit the feasibility of the whole thing, and yet object on the ground of this comparatively trivial increase of cost, might, with equal propriety, object to the construction of our present railways because they cost more than turnpikes. The particular applicability of this plan to the Pacific road needs but little comment. Aside from any considerations connected with the operation of the road when completed, there is one consideration,

connected with its construction, arguing incontrovertibly in its favor, viz: That the time in which the work can be constructed is not limited by any difficulties in the grading of the road bed and its preparation for the rails, but simply by the laying of the track. The materials for this must be transported from its termini, and the contingencies attendant upon this transportation over any new road with incomplete and imperfect regulations, without frequent or convenient stations, without assistance in case of accident, except at long intervals, always delay and embarrass this work. I know from practical experience, that, with proper supplies of materials, one mile of track per day may be laid down quite as easily as one quarter of a mile, for this depends only upon the number of men employed, but I also know that, as an average, not more than one quarter of a mile per day is laid upon any road of fifty miles in length where the materials are transported over the road, and this entirely in consequence of the delays and contingencies connected with this transportation. If this be the case upon a road of fifty miles in length, how must these difficulties multiply upon a road five hundred or one thousand miles in length. Is it not therefore an unanswerable argument, granting all that is claimed for this plan, that the facilities of all kinds for transporting men, supplies, and materials being increased four-fold, the speed and certainty of transportation and delivery being increased in the same proportion, can it, I say, be denied that the work can be accomplished in one quarter the time that would be required if constructed upon the ordinary plan. There can be no doubt that the saving consequent upon this increased speed and certainty of delivery will counterbalance the increased cost of the road.

In common with, I believe, every "Young American," I have the strongest desire to see this road commenced, but I also desire to see it commenced upon a plan which will not be a thing of bygone days, before it is half done. No one great improvement in locomotion has been made since the first introduction of railways. That was a great step. All the rest has been by slow degrees and small improvements in the details. I believe the time has arrived when another great step must be soon made. Certainly, if to be made within the next quarter of a century, it would be well that it should be made before the Pacific road is built.

Such, in as brief a manner as I could well explain it, and with as few comments as the interesting nature of the subject would allow me to use, is the character of the plan I suggest. I have prepared models of both locomotive and cars, which are in Portland, and at your service, as is also this rather lengthy communication from your most obedient servant,

A. P. ROBINSON,
Chief Engineer Louisville & Covington R. R.

JOHN M. WOOD, Esq., Portland, Me.

ARTICLE III.

Address of Uriel Wright before the First Agricultural Fair in Missouri.

Continued from p. 30.

I pass to the second proposition—Is it the *duty* of the *State* to place a thorough agricultural education within the reach of her youth? and if so, how? I assume that she has not yet done it. I assume that within her boundaries, all is not known that ought to be and can be known by proper appliances, to elevate the condition of agriculture—that the State has not furnished the means of acquiring this knowledge—and my purpose is to show, if I can, that she is under an *obligation* to make this knowledge accessible.

On Monday, the 12th day of June, 1820, the people of Missouri in convention assembled, at St. Louis, established a "free and independent Republic" and ordained a written constitution.

For the period of little more than one year, the Republic, thus formed, was in a peculiar sense "free and independent"—for while its people had passed out of their Territorial form, the Republic they formed, was *out* of the Union. But I am not dealing with this peculiarity in her history. The Republic established was "free and independent." Its foundation was laid in the capacity of its people for self-government; and *knowledge*, by the character of the structure, became its necessary support. Knowledge diffused, knowledge in *the people*, who were recognized as the only source of power in the State, so that by the act which gave the form of government, *a duty was created and imposed upon the government* to instruct, to inform and enlighten the understanding, to instill into the mind principles of arts, sciences and morals.

That is education, and the implication carries it to the mind which holds the sacred deposit of power; and that is the popular mind. If the constitution ordained by the people had been silent, the form of government created a duty to *educate*, of perfect obligation, but the constitution is not silent; it speaks; it is not content to rely in this behalf upon even a *necessary* implication, but it puts down what is implied in apt and emphatic words. It gives to education a separate article, and the first words of the first section are:

"Schools and the means of education shall forever be encouraged in this State."

There is the duty which devolves upon the State, and its double origin, both sacred. There is the duty which rests upon her now, and will remain upon her so long as she remains a *free* State. Beyond that hour, I take no interest in her progress.

Education is to be encouraged in this State, not for a time only, but for all time. The men who framed this article had clear ideas. They looked to the past and to the future—they knew that liberty was a hard thing to get, and a still harder thing to keep, and they connected means with the end. They were not content to start with liberty and end with something else. The horizon of Freedom was not bounded to their vision. They looked to no future that was not free. By a clear logic they saw that if liberty was dependent upon knowledge for a single day, it must be dependent on it forever, and therefore rejecting all temporary expedients, they declare the union of liberty and knowledge perpetual.

The organic law of Congress creating the Territory, eight years before, had said: "As religion, morality and *knowledge are necessary* to good government and the happiness of man, schools and the means of education shall be encouraged;" —but the framers of our Constitution reject the preamble, and change the phrase by adding a word of perpetuity. They reject the preamble, not to weaken, but to strengthen the law. They cut off all argument—they silenced all debate about the value or object of education, for they knew that the legal effect of a preamble oftimes narrows the law. They put education now and forever upon the footing of a duty absolute, requiring no argument for its enforcement. They left it as the plain duty of a free State, arising out of her freedom and inseparable from it.

This connection between liberty and knowledge is a legacy of the Revolution. No men who have ever lived on earth, saw or felt the force of this idea as did the men of the Revolution—or so struggled to make it a living idea. In many ways they impressed it. It is to be seen in all their inculcations—but I cannot forbear to remind you of the mode in which one of the great actors of that age sought to transmit the thought to succeeding ages. He was not content that it should be seen in his life, it must speak from his grave—and therefore, penning the epitaph which survives him, THOMAS JEFFERSON wrote these words:

"*Author of the Declaration of American Independence*
and
FOUNDER OF THE UNIVERSITY."

The chisel of the lapidary has engraven the words upon the hard nd imperishable marble of his tomb—and the stone helps biography and history to carry down the truth to succeeding generations.

Education is therefore to be *encouraged—encouraged* by the *State*. The words of the constitution are not addressed to the individual citizen either as a mandate or admonition. They are an injunction on the law making power—the General Assembly.

The duty cannot be shuffled off upon others, while faith is kept with the constitution. Whatever individuals or societies may do, there is still an existing obligation on the State. There is no possibility of evasion; the obligation must be met. The government is built not upon a throne or a peerage—not upon the aristocracy of blood or wealth—not upon any arbitrary or artificial distinction in man. Its foundation is mind—and the State is pledged to see that it shall be educated mind.

But is the State pledged to encourage agricultural education? By the second section of the same article of the constitution, it is provided that the Legislature shall take measures for the improvement of such lands as have been or may hereafter be granted by the United States to this State for the support of a seminary of learning—and it is further declared by the constitution, that the funds accruing from such lands, by rent, lease, or in any other manner, or which may be obtained from any other source for purposes aforesaid, "*shall be and remain a permanent fund* to support a university for the promotion of literature and of *the arts and sciences*." The Legislature is also in the same section pledged to "the improvement and permanent security of the funds and endowments of such institution."

Take these sections together, and you see the whole mind of the framers of the Constitution. You see what they meant by *Education*, and who should have it. *A school in every township*, and the *poor* taught *gratis*; a university dedicated to *Literature*, to *Arts*, *Sciences*; funds for their support—*permanent* funds—out of the reach of legislative power, and never to be blended or mixed up with the revenue of the State—object and means, guarded with unusual care.

But what shall be taught—what literature, what arts, what sciences? The letters, arts, and sciences then known, or a select portion of them—or such as should rise with advancing civilization and knowledge? All of them—there are no restrictive words. The only limitation is that which arises out of the great object of instituting a free government, which is the liberty and happiness of man.

If Agriculture, as an art or science, tends to elevate the character of man—to enlighten his understanding, to promote his happiness, to advance his prosperity, and qualify him as a Trustee of Liberty—it is within the provision of the injunction, and must be encouraged by the State.

And who doubts, that it is the precise office of agriculture to produce just such results as I have named? It is wise and provident that the pursuits of men should be diversified. I make no war upon the diversion of labor. I honor honest toil, whatever may be its vocation, and least of all would I underrate the value of what are called the liberal professions; but unmistakably, of all the avocations of man, agriculture is the noblest and most useful. In proportion to their numbers, the temples of Justice are thronged by fewer agriculturists than by any other class of men. In the jails and penitentiaries they are hard to find, and the poor-house does not number them among her tenants. These are decisive tests of the influence of vocation upon character.

As to prosperity, agriculture is the only producer. She feeds the world. The struggle of all other vocations is to get the riches she affords. They con-

sume her products. In this eternal scramble, what one vocation gains, another loses. Take me as an illustration of the non-producers of the earth.

What I make somebody must lose. I add not an atom to the *wealth* of the world. If, quitting the law, I should go to California and discover a gold mine, still I would not have added one atom to the wealth of the world. Gold is not wealth—it is not value—it is only its representative. But the agriculturist creates wealth; and after his greatest gains he may lie down on his pillow and say: "I have taken nothing from any human creature; no man has lost because I have gained; Nature only has suffered under my toil, and man is enriched by it." I would have him add, "What Nature has suffered must be restored to her, and I will invoke Science to help me to make restitution." Finally, as to the influence of occupation upon freedom — no enlightened statesman has ever doubted that Agriculture is the safest keeper of the ballot-box.

How shall the State "encourage" *agricultural* "education?" The State may encourage agriculture in many ways. This organization is one of them. It stimulates the pride of the farmer—it collects for exhibition the most favorable specimens of certain products of the farm—it begets emulation among the tillers of the soil, and, what is perhaps more valuable, it leads to interchange of ideas between agriculturists, and thus tends to *disseminate whatever practical knowledge is now possessed by them.* But it *creates* no knowledge; it does not *augment* information; it does not furnish *agricultural education.* It does not teach. You come with what ideas you have gathered in your experience, and such may become known to a greater number of persons by the interchange of thought;—but the sciences auxiliary to agriculture are not here taught. You neither experiment nor investigate—you exhibit. If in your respective districts, any successful mode of culture of a grass, a grain, or an animal has been practised, that knowledge may well be imparted here to others, who will go back to their farms, resolved to submit to experiment what has here been communicated. The value of such ideas may thus be tested by a wider field of experiment, and every such test may help to the ultimate deduction of a law or principle—general universal, or only special.

If every farmer came here with carefully prepared statistics, showing the nature of his soil, the character of the seasons, the kind and quality of his seed, the mode of culture adopted by him, the quantity per acre of his yield, the nature of his manures, and how and when prepared, and when applied; together with the value of his land and the cost of production, embracing the wages of labor, when hired, or the value when not, &c. Such statistics gathered by this Association and carefully preserved, from year to year, might, in the shape of authentic facts, form a body of information, not only useful in showing the actual condition of our agriculture, but in leading to improvements in the art. They might be eminently serviceable to a Board of Agriculture as guides to investigation. They might lead to the true mode of culture where conflicting results followed the same mode of culture, or to the suggestion of such modifications as would be called for by different soils and local circumstances. But this Association, in its widest operations, could not furnish agricultural education.

The State might encourage agriculture by the establishment of a Board of Agriculture whose duty should be to collect and distribute all knowledge now known pertaining to the culture of the soil, or the growth of animals, aided by statistics furnished by the census, embracing a wide range of knowledge not now, by law, furnished by our census tables. It might be made their duty to examine and report the condition of the best conducted farms within the State, showing how results were reached in their culture. A commissioner of high scientific attainments might direct the action of the Board.

The State may encourage agriculture by disseminating the knowledge contained in the best agricultural periodicals published within the State, or elsewhere.—Their office is a useful one, richly deserving patronage and support; but, after all, the chief function of the paper is to spread what is already known. It extends the knowledge of the practical operations of individual farmers, but it does not furnish *agricultural education.* This Society, starting under State patronage—the individual Associations which are rising up in various portions of our country—every paper and periodical specially devoted to the art of husbandry—the industrial exhibitions of the world, are, each and all, movements in the right line. They speak the wants of agriculture. They indicate the strong conviction of the popular mind that the art of husbandry needs support; that the time has come when agriculture shall no longer be left to help itself — when it shall

cease to be the only art in an age of marvelous progress, left to struggle on, without the fostering aid and care of the Government. But they do not *furnish* what agriculture *needs*.

Agriculture, like every other art, must be educated. We educate for the law—we educate for medicine—we educate for war, for war upon the land, and war upon the sea. We educate for all arts and sciences, save that art or science which is the noblest of them all, and upon which all other arts and sciences depend. Three-fourths of our population are farmers, and will be for centuries to come, and yet there is not one institution in the United States in which a young man can acquire the important art of becoming a truly intelligent and skillful farmer.

I have indicated some of the sciencees which are the necessary allies of Agriculture. In some of the colleges of our country a portion of these sciences are taught—but they are not taught thoroughly, *and what is worst of all, they are not taught in connection with the art of husbandry*.

The round of studies crowded in a collegiate course of three or four years forbids thoroughness in any. Take chemistry as an illustration. How many *practical Chemists* does Yale or Cambridge turn out? Has she ever graduaded one Agricultural Chemist? Is organic chemistry taught at all? The student learns the *rationale* of an experiment—he does not experiment himself—he does not analyse. I would not undervalue the advantages arising from even the superficial knowledge of science acquired at these institutions. All knowledge is useful—and the graduate may be master of principles and laws, which, after application and study, may ripen into science. But with such know edge of the natural sciences as acquired at our best seminaries of learning, can the graduate rank as a skillful farmer? Can he be regarded as a farmer at all?

Agricultural education is theory and practice blended. It is knowledge applied—applied in the daily operations of husbandry. It is science, by the hand of labor, applied to the field, to the meadow and the barn-yard. The educated farmer is one who knows how to conduct his farm in conformity with the laws of nature. We have no institution at which this knowledge can be applied. Until such institution be established, let this Society, and kindred associations, live and work. Let the Agricultural Editor toil on with his press—supported and cheered by the farmer—by the influence of a healthy public opinion, and, if need be, by the State—and let a part of that work and toil be to demonstrate to the General Assembly, both the necessity of such an institution, and the obligation to establish it.

Our Government is popular—the men who make laws are only agents. The interest of agriculture is the greatest interest; the numbers engaged in it are a majority. Let its voice be a controling power in the State. I know that impediments will rise up to stop this scheme of benefaction. Prejudice will shake its hoary brow at it. Ignorance, venerable also for its antiquity, will smile at the thought of analyzing nature; and economy, in its Jewish gaberdine, will count the cost. Knowledge has ever had enemies, and these are her hereditary foes. It would be strange, indeed, if agricultural learning should *not cost*. Despotism costs—Monarchy costs.—Thrones and diadems are costly things. Liberty costs. Our own American liberty was won at great cost—and I trust it will be maintained at every cost.

Knowledge will cost—but we are able to buy it. I hope we shall not give more for it than it is worth. But ignorance, prejudice, and parsimony are not the proper appraisers of its value.

It will be said, if Agriculture needs teaching, and for teaching must have the school, the experimental farm and the college, why have they not been established heretofore? This question might be answered by putting others, embracing the history of all progress. Why is chemistry, as a science, only a century old? Why is agricultural chemistry half a century younger? Why is organic chemistry younger still? Why did not FRANKLIN invent the telegraph? Why did this world wait for FULTON to make a steamboat? And for GRAY to invent the locomotive? Why, indeed, is it that there is such thing as progress in human affairs? The propriety or necessity of educating agriculture can never be determined by such enquiry; but it is not difficult to trace some of the causes which have led to the present neg ected condition of the art of husbandry in our own country.

Bishop BERKLEY'S celebrated prophecy as to the march of "empire," might with equal truth have been uttered of agriculture — for since the world began

empire and agriculture have traveled together, and their course has been ever toward the setting sun. The decline of Roman power began with the decline of her agriculture—and Rome fell when her luxurious population, deserting her fields, looked for *distant* provinces for supplies of corn. I know it has been said that the Spartans conquered the adjacent States of Greece because the soil of Sparta was too poor to produce corn. But the short-lived plunder cannot shake the eternal truth, that the stability of a nation's power depends upon its soil.

Our own country, then a part of the British Empire, attracted the attention of this eminent prelate and philosopher, and its immense resources then but dimly seen, may have inspired a prophecy, which will be remembered when his metaphysics shall be forgotten. His benevolent spirit originated a vast missionary scheme for the conversion of the red man of the wilderness—and he sailed to this country to execute it—but after a residence of two years his policy was frustrated by the administration of Walpole. I do not think it out of place to add—as a just tribute to agriculture—that Christianity must take agriculture with her into the forest, before she can reasonably hope to subdue and convert the heart of the savage. The hoe and the plough are the true pioneers of the Bible.

The vast area of this country compared with its population, and the richness of its virgin soil, conspired to bring about a careless culture—ending in the present state of agriculture in America. Man has relied more upon the bounty of Providence than upon his own skill. West of every worn-out field lay acres untouched by the hand of toil. West of every State exhausted by injudicious husbandry, lay territory in its virgin state, too tempting to the emigratory principle in man. It has been deemed less difficult to open a new farm than to improve an old one. Our population, by a law seemingly as irresistable as that which carries the waves of ocean to the shore, have from the Atlantic board, passed the Alleghanies, climbed the Rocky Mountains, and descended to the Pacific. Nothing in the world's history is like it. In 1620, the men of Plymouth Rock saw the first light of morning gild the waves of the Atlantic, and now their descendants see twilight deepen on the smooth waters of the Pacific.

A continent has within the period of a little more than two centuries, been subdued into civilization by our people, and much the largest portion of it has been compassed since the Declaration of Independence. In this eventful period, government, laws, and institutions have arisen—the creations of American mind—which extort the admiration of the world—but the genius of our people has not, heretofore, been led by inventive *necessity* to study the mysteries of the production of the earth. No famine has ever swept over this our own beautiful portion of the globe. With small toil its population has been fed, and a surplus produce has gone to supply the wants of older and more crowded nations. America has had more *land* than *laborers*, and accordingly we see the inventive mind of our country creating laborers out of wood and metal, and sending them to the field to do the work of men. In this department of enterprise, with the untaught study of only twenty-five years, we lead and teach the nations of the earth. And in any field of human enterprise, set but an object and a motive before the mind of America, and she will win trophies against the competition of a world.

Bounded now by two oceans, the period has arrived in the history of our country, when the public mind is directed to the improvement of our present possessions, and the agricultural mind of our country, especially, to the *improvement* of the soil within its present boundaries. The indications are unmistakable, as they are wide-spread. North and South, East and West, the cry is up, "why shall not Agriculture be an educated art?" Why shall not educated mind, go from the halls of learning, to the farm, as it goes everywhere else? How the young mind shall be educated to fit it for the field, has not been decided. It is a great question, requiring thought and mature deliberation. It is a subject worthy of the best energies of the best minds of America. Whatever suggestions I offer, is with diffidence, but by whatever steps of progress led, it seems to me, the end must be, the school, the experimental farm, and the college. I know no other mode by which Science—Agricultural Science—can be so taught as to *blend theory* and *practice*—the highest consummation of art. In other countries important attainments have been already reached by these instrumentalities. Europe, engaged for centuries in the cultivation of the arts of war, has since the fall of Napoleon, turned its attention to the arts of peace. In the short period of its repose, three hundred and fifty schools and colleges exclusively devoted to agricultural education, have arisen, surrounded by experimental farms, upon which the sciences taught have been practically applied. Necessity, that wonderful

mother of invention, has forced Europe, with its crowded population, to seize upon the first years of peace, to learn how to make the earth more bountiful.—Germany, France and England, within that period, have given birth to chemists of world-wide distinction, who have illustrated the power of Science over the soil. Government has been wise enough to put by the side of all engaged in the culture of a plant, or the growth of an animal, the chemist who has studied the laws of vegetable and animal physiology. The man of science has been able to teach the sheep-grower how to improve his wool. The testimony is uniform to this great practical test of usefulness, *that wherever these institutions flourish, Agriculture is most elevated as an art.*

Distinguished travelers, the reports made to our Patent Office, and the instructive evidence furnished by professor Hitchcock in his celebrated report on the condition of agriculture in Europe, made upon personal inspection, establish the truth of the proposition.

The Royal Agricultural College, at Cirencester, has six professors, and seven hundred acres of land for agricultural purposes. The school at Grignon, near Paris, has also six professors—and in this school, where the education is thorough, the entire course is three years. The experimental farm attached to it contains seven hundred and fifty acres. France has at present seventy-five agricultural institutions. The present ruler of the French nation has shown—whatever else he has exhibited in his imperial sway—sagacity and wisdom in his department of agriculture. At Versailles there is a National Agronomic Institute, employing nine first class professors and three thousand six hundred and fifty acres of land. The course of instruction in France embraces a wide range of the sciences. Thus the Grignon school teaches algebra, geometry, mechanics, surveying, leveling, stereometry, [the measuring of solied bodies,] and lineal drawings in the mathematical sciences—in the physical sciences, mineral chemistry, mineralogy, geology, and botany—organic chemistry or agricultural technology, agricultural arboriculture, sylviculture, veterinary art, agricultural zoology and equitation, in what are denominated technological sciences and rural architecture, forest economy, farm accounts, rural economy and rural law, in the noological sciences. This institution has already graduated six hundred students. Prussia alone has three superior schools, two intermediary schools, twelve inferior schools, thirteen special schools, and two connected with colleges and universities.

They abound in the various principalities of Germany, in Italy, and the Autocrat of Russia, in his wide domains, has found it necessary to establish sixty-eight agricultural institutions. The superior schools rank with our best colleges, in the extent and variety of the sciences studied, and the intermediary schools may compare favorably with most of our colleges. The institute established as late as 1818, by the King of Wuertemberg, has a royal domain of eight hundred and twenty-five acres, one director, six professors, besides six other functionaries charged with various labors. The instruction given is embraced in three departments. First—Agricultural matters. Second—Forest matters. Third—Auxiliary sciences. Omitting all that relates to the forest, let us glance at what is included in the agricultural course and the sciences in aid of agriculture.

First—Climate. Second—Soil. Third—Manures. Fourth—Tools and implements of tillage. Fifth—Of clearing up of ground. Sixth—Of meadows and pastures. Seventh—Of agriculture in general. This is divided into ploughing and other tillage, seed plots, [of grain and root culture,] threshing and preservation of grain. Eight—Of special agriculture. All cultivated plants are treated of particularly. One course of studies is viticulture, embracing the culture of the vine, and vine making. Another, the culture of fruit trees. Another, the rearing of cattle—the various races, their crossing, and the treatment of their young. Another, the rearing of the horse—his natural history, the different methods of raising, the choice of animals for reproduction.

The treatment of mares and colts, another rural industry in *winter*,—the manufacture of beet sugar, of liquid manures, &c., in *summer*, the manufacture of vinegar, cider, lime, and draining tiles, and the last course in agriculture embraces the whole field of rural economy: as valuation of real estate, general circumstances of the country, of farms in general, and the different parts of the same farm, of the home means of maintaining its fertility, of systems of culture, of labor and the internal organization of a farm, of the relation between the number of beasts and the land worked, of the capital of the farmer, of the different modes of working a farm, and the last, agricultural book-keeping.

I glance only at the sciences auxiliary to agriculture—higher arithmetic; algebra, trigonometry.

The science of measuring solids, applied geometry, mathematics applied to the culture of trees and the entire forest, and their valuation; physics, mechanics, chemistry, vegetable botany and physiology, special and rural botany, zoology, veterinary medicine; the natural history of domestic animals, their anatomy, animal physiology; the care to be taken of animals, the treatment and medicine for slight diseases, the description of diseases, pathology and therapeutics; veterinary surgery, the internal diseases of animals and murrains; rural constructions, prepairing plans and drawing of machines.

To illustrate these courses of instruction, the means are ample. Among them, the operations on a large farm, annexed to the Institute, a forest of five thousand acres, a botanic garden, a library, a geological and mineralogical collection, a collection of woods, seeds and resins from the forest, a collection in comparative anatomy, and a collection of specimens of wood; specimens of agricultural products; models of instruments of tillage, models for physical science, and collections for chemistry and the laboratory.

I should weary you by any further detail of the system of instruction established at the most celebrated of the Agricultural colleges of Europe. They form an interesting study for the statesman and the man of science, when he comes to the model which shall be adopted in our own country.

The question has been vexed in Europe, as to the manner of teaching the youth who devotes himself to the business of husbandry. In Prussia, and in many parts of Germany, they begin with the *practice* and end with *theory*. The student is made familiar with all the manipulations of husbandry, before he masters the science which directs them. Perhaps you will pardon me if I bring before you a nearer view of the working results of these Institutions.

At Breslau, in Prussian Silesia, in September, 1845, a meeting of German agriculturists was held, numbering about one thousand members. Several sovereigns were present by deputies—the agricultural societies were represented by their ablest members, and the most distinguished scientific Professors of Agricultural Institutions, formed a constituent part of the assembly. After a speech from the President of the body, on the condition of agriculture in Silesia, the organization of six committees, to report upon six subjects, to wit: 1. Agriculture proper. 2, Raising Stock. 3, Culture of the Forest. 4, Technical branches. 5, Fruit and Vine culture. 6, Wool-growing.

The examination of sixteen students came off—students who had been instructed in various agricultural institutions of Prussia and Germany. These young gentlemen were seeking to become qualified to conduct the operations of Baronial estates. The eldest was twenty-three, and the youngest, sixteen years of age.

After answering various questions in writing, connected with their studies, they were taken to an estate called Rosendale, near Breslau. In the yard the pupils were shown a wagon, marked in thirty-six parts—a plough in thirty-five parts—a harrow in six parts—making altogether, eighty-two separate parts. Each pupil had to put down on paper, the name of each part to show whether he was acquainted with all the parts of the different implements, and in case of breakage, to mention the most efficient mode and means of repairing.

A sheep was then brought forward, and they were required to put down on paper, the answers to the following questions: 1st. Is this sheep healthy—and why? 2d. How old is this sheep? 3d. What is his age in shepherd language? Each pupil was next required to catch a sheep himself and examine it, and report whether it was diseased, and the signs of the disease. They were also to point out upon a sheep the places where the worst wool grows, and on which the best—and likewise to designate the places where the faults of wool are most liable to be inherited. Several head of cattle were now brought before them, and the following questions propounded:

1. How much milk can a cow of this breed give, when fed with grass or other green fodder? and how long since she had a calf?

2. How many pounds of fodder does a cow of this breed require per day, during summer—how much during winter—and the cost?

3. How many calves has this cow had? And how old is this cow?

4. What breed is it, and why do you say so?

5. How much will she weigh of meat? how much of tallow?

They were then examined upon horses. The horses being first inspected by the pupils, the following questions were required to be answered: 1. What are the peculiar qualities of this horse as a plow horse? 2. Which of these qualities are requisite for a good plow horse, and which are not? 3. How old is this horse? 4. Several places were designated on the horse, and the pupils were required to tell what diseases affected this or that part, and the remedy. 5. The anatomy of the horse, and the hoof especially, became the subject of examination.

The pupils were then conducted to the barns, where they had to show their skill in making straw bands, in cleaning grain and in sowing grain, &c. Afterwards they were taken to the fields—first to one of light soil, and then to one of heavy soil, and the following questions were put to them. 1. What is the name of this kind of soil? 2, What are the names of the principal parts of which this soil is composed? 3, What is the name of the subsoil, and is the subsoil retentive or not? 4, What kind of crop succeeds best on this kind of soil? 5, How large would you make the beds on such soil, and why? 6, Is this soil heavy or light, cold or warm? These and similar questions were asked of the soil at different spots. They were then asked, in writing, the following questions. 1, In the case of a heavy soil sown with wheat and oats, and in that of a light soil sown with rye—state for every month how much ploughing and harrowing has to be done, and with how many horses or oxen? How much manure will you require, expressed in loads? Do you call that light or heavy manuring? How will you treat the manure in the stable, in the dunghill, and in the field? When you have at command drainings of your ordure pile and mineral manure, how and for what crops would you use them? What kind of weeds appear in the summer crop? What in the winter?—and how would you destroy them? How keep them from coming up? If you have good and bad meadows, to what kind of cattle will you give your best, and which the worst kind of hay?

In the department of economy — involving the relation between the various kinds of labor to be performed, and the force necessary to its accomplishment, the examination was conducted with great rigor. It embraced the preservation of every crop—and the *distribution* of the labor as well as its amount. So also the subjects of drainage and ditching, and other farming operations in their minutest detail, were put to the pupils with rigid severity. The examination closed with the important theme of Agricultural Book Keeping—showing the entire operations of a farm—the relative distribution of forces—and the cost of food consumed by each animal—and the wages of labor.

I give you the collected mind of this august assembly of Agriculturists in the form of four propositions reported by committees, and adopted by the meeting—

1—Educate the masses for their pursuits in after life.

2—In regard to Agricultural education—the *practical* must be thorough.

3—In Theory, all high scientific speculation should be avoided; and its application to practice alone be taught.

4—To establish Boards of Examination over all Germany, with proper examiners for every district.

Under such maxims the educated agriculturist will not be apt to run wild upon beautiful but visionary fancies. Theory is tested by the true touchstone of truth—the capability of being reduced to practice. I trust we shall ever avoid the Sangrados of Science.

There is no universal sovereign specific for the cure of sick soils. Above all other pursuits, agriculture demands the co-operation of knowledge and ability —theoretic acquaintance and practical skill, insight and outsight.

I would have my country profit by the wholesome lessons of all countries, but just distinctions must be made, arising out of difference of circumstances. The course of instruction suited to Europe will require modification here. We must adopt its agricultural learning, as we adopt the common law of England, only so far as it is suited to the nature of our institutions and local condition. Light, heat and moisture, climate and seasons are important agents greatly modifying in different localities the processes of nature. The education for America —must be American.

Who shall teach? will be the enquiry of adversaries. The question is pertinent and the objection plausible. Who shall teach? The answer is two-fold. Our institutions of learning in the beginning were conducted by European mind. In founding the University of Virginia, Mr. JEFFERSON relied upon Europe for

Professors in several important branches of science. But I take high ground. Mind, like commerce, obeys the law of demand and supply. Create a demand for intellect in any walk of human enterprise, and it will be supplied. I feel my breast swelling with the proud thought, that the intellect of my country will honor every draft that may be made upon it, under whatever exigency of progress.

In England, the pride of birth impairs the usefulness of her best agricultural college. The sons of noblemen will not work, save by the side of their peers. The young sprigs of nobility lose caste if seen toiling by the side of a youth whose father never wore a star or garter! What artificial things aristocracy makes of men. Will the day never come, when ribbons shall cease to dwarf man? When the now impassable barriers of caste, shall be broken down, or perish piecemeal, by that law of decay which attaches to all things immature? When human progress shall no more be arrested or impeded by the conventionalisms of rank, creating distinctions in man, which the vision of his Creator is not sharp enough to see?

If there be, within the sound of my voice, one father whose parental pride is seeking to gratify itself by placing his son in a position *above* the rank of farmer —if there be here one Madame Deschapelles, who sighs to wed her daughter to a title—one beautiful, proud Pauline, who yearns to glitter as the bride of nobility?—to that father I say, You have forgotten the lessons of the father of your country;—to that matron, You will never be the mother of a great American statesman;—to Pauline, True nobility in man is never found above the dignity of labor.

And if there be in our State one youth of promise, who feels within his breast aspirations kindled by the pride of intellect — who whishes to make his mark upon his age and generation—who scorns to be ignorant, and would rise to knowledge, but would avoid the fields as not being the path that leads to fame— I have some special words for him: "Young man, what do you aim at? what model of excellence is in your mind? to what country and what age do you look for an example? Are you fascinated by the deceptive halo which antiquity throws upon the men and deeds of remote ages? Then go to Rome in her purest, palmiest days—when to be a good citizen was to be a good farmer—when to be a skillful agriculturist was the highest distinction of a Roman citizen—when unskillfulness in farming was visited by the rebuke of the Censors. Study the names of such Romans of that period as history makes immortal, and you will find that they come down to us, not by the names given to them at birth, but by titles derived from the plants and grains brought to greatest perfection under the culture of their own hands. In that school of virtue and true glory you will find that history had a holier office than to record the intrigues and battles of ambition. Or, if willing to take a model from the short but glorious career of your own country, look at the names which make a part of our national property. Of all the men who have shed lustre upon our annals, how few can you number who were not farmers!

Be assured, there is not an error more mischievous to start with in life— no one apter to mar the usefulness you aim at, than the mistake of supposing any incompatibility between husbandry and greatness. Statesmanship, which opens to noble ambition the widest paths of honorable fame, is only farming on a large scale. Are you captivated by the exhibition of intellect in its highest reach, winning loftiest honors at the bar and in the Senate? Contemplate the life and death of Daniel Webster. See how his mind acquired strength of fibre, in his farm life, amidst the hills of New Hampshire; watch it in the acquisition of knowledge at college; its earliest triumphs at the bar; pursue it to the Senate Chamber; the scene of its matured splendor; follow it in the quiet shades of Marshfield; and every where you will behold its unbroken allegiance to the soil. In the last days of his life, what brings him from the sick chamber to the porch, to look for the last time upon a scene lit up "by the sun in heaven?" Upon what does his "last lingering glance" fix itself? The ocean is at his feet; he hears its murmurs, and the sea breath fans his whitened locks; perhaps his soul-seeking sympathy with its own elements of grandeur, gazes on what in nature was the type of its depth and power? No! no! it is not that; his deeply poetical nature turns from the contemplation of mere physical nature in her sublimest aspect and seeks the "utterances of life" in pastoral simplicity. He turns from the sea; his eyes are on the fields enriched by his culture; on the lowing herds who miss the hand that fed them. In that moment, whatever are his other aspects, he stood revealed to us and to the world, as the farmer of Marshfield.

Mr. President, we live in a remarkable age. The human mind, starting out in new paths of inquiry, has established a new dominion over the physical world. On the sea, and on the land, Time and Space, the old foes of progress, are nearly conquered—conquered by Science. Once they were Despots, but now, reasonable Rulers, confined within certain well defined limits of power. The spirit of progress demands yet further restrictions. See how science has laid her hand upon the sea! Commerce once crep from headland to headland in timid crafts. Science gave her the compass, and she went from shore to shore. Naval architecture then became underwriter for the safety of cargo and crew. The mad waves which once severed nation from nation, science turned into the theater of national contests in peace and in war; and weary of the laggard and fickle motion of the winds, she seized the invisible strength of water, put it into iron harness, and defied both wind and wave. She made "her home upon the deep," but her greater triumphs are on the land. The locomotive is swifter than the steamship. By their united power, oceans dry up, continents shake hands, and Ariel's girdle belts the earth. Men are made of wood and metal and stone—swift men—strong men—enduring men—who live and work, without food, without sleep, and on small pay—but amidst all this marvel of progress, which changes the commerce and character of the world, puts new ideas in the heads of statesmen, and reverses the policy of cabinets, how little has been accomplished by science to augment the productive power of nature! She has been treated as if the principle of decay could never touch her bosom, nor the process of exhaustion diminish its supply. Agriculture is the only art left behind in this unparalleled advance of all other arts and sciences. Is this neglect, a necessity or an oversight? That is the great question for solution. Let the agricultural mind of Missouri determine it.

The earth belongs not to those who now live on it. It is an estate in perpetuity. We are the tenants of this age, and there are countless ages of remaindermen. Responsibility to God and man rests upon all who injure or destroy the fee.

Article IV.

[From the Railroad Record.]

Iron Mines, and Iron Trade of Ohio and Cincinnati.

The production and manufacture of iron is of immense importance to any country, or state. It is speciully important that iron mines should be near any large town, like Philadelphia, Cincinnati, or St. Louis, which must depend chiefly on a trade with the interior — always largely increased by a capacity to manufacture iron articles of all sorts. Of the great advantage Cincinnati has derived from this source, we gave one example, in our last number but one, in the manufacture of marbleized mantels by Horton and Macy.

We shall not exaggerate, when we say that in Cincinnati, and its suburbs, there are not less than *sixty iron factories* of the largest sort—which, with their dependent work-shops, give employment to full *five thousand operatives.*

This immense development of the iron manufacture has arisen chiefly from the nearness and excellence of the Ohio Iron Mines. This fact also insures the continuance and extension of this kind

of industry far beyond its present limits. It is also quite sure to result in raising up large towns, in the mineral region, where coal, iron, and stone, lie contiguous to each other. We have an example of this in the rapid growth of Ironton, which is only one of many towns, which will grow up to magnitude and prosperity in the same region, as time and capital develop the mineral resources of that section. As the iron business has risen to so much importance, and is so intimately connected with railroad traffic, it may be interesting to give an outline of the Iron Mines, and Iron business of Ohio.

The iron ore of Ohio is found almost entirely east of the Scioto, and occasionally in the form of bog ore, in the north. The principal depositories are in the counties of Adams, Scioto, Lawrence, Jackson, Vinton, Hocking, Gallia, Athens, Muskingum, Licking, and in the same geological section continued to the Lake. The *furnaces* are found almost entirely in Adams, Scioto, Lawrence, Jackson and Gallia. One has recently been built in Hocking, and one on the edge of Athens.

The Iron works, and Iron produce of Ohio, are:

PIG IRON.

Furnaces	35
Tons of Iron Ore used	140,610
" Pig Iron made	52,658
Bushels o Coal consumed	605,000
" Coke and Charcoal	5,428,800
Operatives employed	2,415
Capital invested	$1,600,000
Value of Products (in 1853)	$2,000,000

In the production of Pig Iron, Ohio is the *second* state in the Union, being next to Pennsylvania. Pennsylvania produces *half* the Pig Iron of the United States, and Ohio about *one-tenth*.

IRON CASTINGS.

Factories	183
Pig Metal, Iron, and Ore used tons,	41,000
Castings made "	38,000
Coal consumed bush.	840,000
Coke and Charcoal "	355,120
Operatives employed	2,758
Capital employed	$2,000,000
Value of products	$3,200,000

WROUGHT IRON.

Factories	11
Pig Metal used tons,	13,675
Blooms "	2,900

Coal consumed	bush.	600,000
Coke and Charcoal	"	466,900
Operatives employed		708
Wrought Iron produced	tons,	14,416
Capital invested		$700,000
Value of products		$1,500,000

In the manufacture of castings, Ohio is the *third* state; and in wrought iron the sixth. The establishments for the manufacture of castings are *one-seventh* in number of those in the Union.—The following general view will give the *relative* standing of the principal states in the manufacture of iron:

	Iron Works.	Value of Products.
Pennsylvania	631	$20,327,000
New York	401	7,941,000
Ohio	229	6,700,000
Virginia	122	2,450,000
New Jersey	108	1,975,000
Tennessee,	81	1,610,000

These states produce more than two-thirds the iron ore and iron manufactures of the United States. Both Tennessee and Kentucky are destined to produce and manufacture an immense amount of iron; but, at present, Ohio is much ahead in that department of industry, and has raw material to supply her manufactures for generations to come. It is destined to enter very largely into the business and construction of railroads. It is a very extraordinary thing, that in view of the very great superiority of American iron rails in wear, that our Railroad Companies have not obtained more at home. The system of buying iron for bonds will prove a very bad one, if it diverts the support which ought to have been given to American industry into foreign channels. We undertake to say, that if the English did not sell their iron for bonds on a very long credit, they would not have been able to sell one-fifth the amount which has been brought to this country.

Having given an aggregate view of Ohio iron manufactures, it may be well to note its *growth*. This is quite extraordinary. The comparisons of results, under the censuses of 1840 and 1850, were:

	1840.	1850.
Iron Works	92	229
Operatives	2,581	5,881
Value of products	$3,421,000	$6,700,000

This comparison shows that in the aggregate, the iron business of Ohio increased 100 per cent. in ten years. From the aspects

of business in the last three years, we may safely anticipate that it will increase yet more rapidly in time to come.

Looking specially to Cincinnati, we find here an immense and rapidly increasing iron manufacture. As the pig metal and bloom brought to Cincinnati, with much of the iron bar, is used in various manufacture, the annual imports of iron from the iron region is a fair test of the progress of iron manufacture and consumption. Here we extract the following return of iron imports into Cincinnati from the "Price Current:"

	1848–49.	1852–53.
Iron, tons	1,768	14,124
" pieces	187,864	294,001
" bundles	29,889	66,131
" pigs tons	15,602	30,171

We then find that, in the short space of *four years*, the import and manufacture of iron in Cincinnati has increased at least 150 per cent. We discover further, that while, at the present time, about 55,000 tons of iron are produced in Ohio, 44,000 tons are imported into Cincinnati. A part of this import comes from Kentucky, Pennsylvania, and Tennessee; but much the larger part from Ohio. It is, therefore, very evident that Cincinnati is the great market and manufacture for Ohio iron; and indeed for that of Upper Kentucky. At the very point in the Ohio Valley, which is left out of the coal and iron seams—as if to depend solely on agricultural products—she has, by virtue of steam communication and her own enterprize, become the very best point, and actual center of all those branches of industry which depend upon coal and iron to develop. She has put *her long arms* into every mine and every granary, supplying herself with material and food, which genius, enterprize, and industry, have converted into the elements of wealth and prosperity.

ARTICLE V.

JUVENILE REFORM SCHOOLS.—Petition of M. Tarver to the Congress of the United States.

TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES IN CONGRESS ASSEMBLED.

The undersigned, a citizen of the city of St. Louis, State of Missouri, respectfully represents to your Honorable body that the action of the thirty-second Congress upon the Homestead bill and other bills, relating to the disposal of the public domain, and the general approbation with which those measures seem to have been regarded by the people, have led him to conclude that the policy of looking to the public lands as a source of revenue, is destined to give place to one more liberal and philanthropic.

Proceeding upon this assumption, your memorialist respectfully suggests that among the many objects claiming the consideration of your Honorable body, none possess higher claims than the cause of intellectual and moral improvement. Intelligence and virtue constituting the only solid basis of democratic institutions, the first and highest duty of the government, is to make sure the foundations upon which it reposes.

By referring to history, it will be found that the decline and final dissolution of all the great nations which have passed away, may be traced to the vices of their cities; and it will be conceded, as your memorialist believes, that similar causes are not less fatal to democratic than to monarchical institutions. Nor are the cities of the United States less fruitful in vice than those of other countries.

According to data, believed to be authentic, there were twenty-one thousand two hundred and ninety-nine commitments to the prisons of New York city, in the year 1850. It is true, all these may not have been voters; but it is reasonable to infer that the number of depraved individuals who are entitled to vote in that city, is at least equal to the number of commitments. That such men can be bribed, it would be folly to doubt; but the extent to which they may control the policy and future destiny of the nation, depends upon contingencies which none can foresee.

Though the criminal record of the city of St. Louis may not contain facts as startling as those which have been shown to exist

in New York, yet most of the causes of moral degradation in the latter prevail in the former.

Situated at the commercial center of the basin of the Mississippi, St. Louis is the point of destination for a large portion of the immigrants intending to settle in the Valley States. And though industrious, honest and respectable as a body, many arrive destitute of money, and not a few ignorant and vicious. The hospitals and poor-house are crowded with the sick and disabled, and the house of correction with the idle and profligate. The latter possessing no disposition to engage in rural occupations, remain in the city, and hence, in addition to the vices of local origin, there is almost a daily importation from other countries.

Thus far, the city authorities and citizens of St. Louis have acted most liberally in making provision for the unfortunate, and with becoming energy in correcting the vicious; but the continual and accumulating demands upon their means for immediate relief disable them from making appropriations to establish reformatory institutions upon foundations sufficiently broad and permanent to countervail the fruitful sources of vice which menace the city with the evils of pauperism and crime.

In view of these facts in connection with the immense quantity of lands held by the General Government, a wise policy would seem to demand an appropriation of a sufficient quantity of the public domain to establish and support institutions calculated to prevent the growth and accumulation of pauperism and crime in the city of St. Louis, and in other cities affected by similar causes.

Will your Honorable body give a homestead to every individual who may settle upon and improve the public domain? The consequences of such a measure would be but temporary. It may expedite the settlement of the public lands, and improve the condition of individuals, but the condition of the next generation, as a community, would be no better than if the lands had been sold by the government, at a reasonable price.

Should Congress make donations to aid in the construction of railroads and canals, such a policy would be wise and just; yet, all these improvements will be made, in their proper time, by individual enterprise and capital; and when done, the wants of commerce will be as well supplied, and the wealth of the nation as great, as if the work had been done at the cost of the government.

Will you donate lands to ameliorate the condition of the Indigent Insane? Truly, this would be a philanthropic and praiseworthy act, but its influence would be limited to a small number of individuals who are incapable of crime, and can in no way endanger the stability of our institutions. Or, will you distribute a part of the public domain among the States for the support of common schools? Such a measure would be worthy of the age, worthy of the country, and worthy of American statesmen.

If one, or even if all these measures should be favored by your Honorable body, still there is an additional argument in behalf of a grant in aid of Reformatory institutions: JUVENILE REFORM SCHOOLS for large cities, where, instead of being sent to the work-house or prison, and compelled ever after to live an outcast and a pest to society without hope of amelioration, the youthful offender— the offspring of vicious and degraded parents—shall be separated from his associates in crime, and educated and trained to some honest employment.

Missouri is the largest of the Valley States: and it is but reasonable to conclude that she will, in time, contain a larger number of inhabitants than any other State of the Union. St. Louis is destined to be a mighty city, controling, in a great degree, the social condition of the State, and affecting indirectly the policy of the nation. And if in proportion to her population she should ever contain the number of paupers, and the amount of depravity, which are known to exist in some of the large cities, contingencies may arise when this accumulated mass of ignorance and vice will control the destinies of the republic. Hence, the social condition of the citizens of St. Louis, and of other large cities, has a relation to the well-being and permanency of the Union, which may well claim the consideration of American statesmen.

And believing that none of the objects herein mentioned possess higher claims to a portion of the public domain, your memorialist respectfully prays your Honorable body to donate to the State of Missouri, a reasonable quantity of land, to be held in trust for the establishment and perpetual support of a Juvenile Reform School, embracing such objects, and to be established under such rules and regulations, as the legislature of said State may prescribe.

And your memorialist will pray, &c.

M. TARVER.

ARTICLE VI.

Report of the Secretary of the Treasury.

The subject of "National Finance," involving the question of protection to American industry, and the principles of free trade with foreign nations, affects, either directly or indirectly, every branch of industry in this country; and, consequently, the facts developed by the operations of the existing tariff of duties, commend themselves to the careful observation of every American citizen. The most imposing fact presented in the following report is the excess of duties collected beyond the wants of government, during the last fiscal year.

We have ever been the uniform advocates of protection to American industry; but are constrained to admit that the degree of protection should be modified by the amount of revenue required for the support of the government upon liberal and just principles, administered with economy.

Frequent adjustments of the tariff are to be deprecated: no change can be made without affecting adversely the interests of some one, or perhaps many branches of industry. Hence it will be wisdom on the part of Congress, before making any important change in existing regulations, to consider well whether the excess of revenue has not been occasioned by causes temporary in their nature; and if so, whether it is not better that there should be an occasional surplus than a general deficit?

The suggestions of the Secretary of the Treasury, touching the enlargement of the "free list," command our approbation. This is doubtless the true mode of reduction, so long as it acts upon commodities which do not come in competition with American industry. But we find articles in the "free list" proposed by the Secretary which, in our opinion, deserve protection in as great a degree perhaps as any now on the duty-paying list. We notice the more objectionable articles in the order in which they stand on the list.

Copper in pigs, bars, plates or sheets. Copper when old and fit only to be remanufactured, and copper for sheathing of vessels, is proposed to be admitted free of duty. The two main objects of a tariff—revenue for the support of government and protection to American industry—are most fully recognized by the Secretary

in his report, but he seems nevertheless to have studiously avoided the word "protection," for it does not appear even once in connection with the subject. Now, if we keep these two objects in view, it must be admitted that the policy of abolishing the duties on copper is, to say the least of it, very ill-timed. Great Britain has long controlled the copper trade of the world. We have been dependent upon her for our supplies, and it is only within a few years that a spirit of mining for copper has been awakened in this country. Much labor and capital has been employed in explorations, and there are but few instances where sufficient progress has been made to compensate the labor and money expended. And should the duties be taken off of foreign copper at this particular juncture, it would operate unjustly to those who have so recently engaged in the business, and act as a check to this branch of industry, from which it would not recover for many years.

Earthen and Stoneware, are also put upon the "free list." Our objections to admitting foreign copper free of duty, apply in all their force to these articles.

Madder, ground, and madder root. Until very recently the culture of this plant has been almost entirely neglected. It is now beginning to attract attention, and if it should be found profitable to the grower, we shall soon supply the home demand. We think it would be an unwise policy to abolish the duties on the foreign article at present.

Red and White Lead. It is proposed to place these articles also upon the free list. To this there is a two-fold objection: it is calculated to affect adversely both the mining and manufacturing interests of the country. We can perceive no argument that will justify the prostration of this branch of industry, that would not apply with equal force to any other in the land.

Steel, in bars, cast, shear or German. We can perceive no good reason for making a distinction between this article and iron, and trust that if any change be made, Congress will place both upon the same footing.

Wine of all kinds, except champaigne, imitations of wine, and adulterated wines. The proposition to place this article on the free list, suggests many interesting topics relating to the history of the country. Formerly, wine was regarded as a luxury enjoyed chiefly by the rich, and was therefore deemed a very proper object whence revenue should be derived. This was a just view

of the subject when the Statesman was compelled to look around for objects of taxation which were best calculated to equalize the burthens of the community; but now the question arises, to what extent can articles of luxury be relieved from duty, with a view to the protection of labor? And did we not possess an extensive region favorable to the production of wine, we should unhesitatingly assent to the proposition of the Secretary of the Treasury, to place that article on the free list. But the culture of the grape, so long neglected in this country, is beginning to receive considerable attention in several of the States. This branch of industry is now in its infancy, struggling against the difficulties incident to all new pursuits, and if the action of the government should materially affect the prospects of profits to be derived from it, there is great danger that it will be abandoned entirely.

We have long regarded wine-growing as worthy to be classed among the most important branches of rural industry. It claims the countenance and care of the philanthropist as well as of the statesman. For while it is calculated to increase the volume of national wealth, it will be found a more potent friend to the cause of temperance, than the Maine liquor law combined with all the associations which have ever been formed to prevent the use of destilled liquors.

The Secretary of the Treasury has excepted Champagne from the free list; if this exception could be extended so as to embrace all those sorts of wine which are most likely to compete with our own products, then we should not object to relieving all others from the payment of duties.

There may be other articles amongst those proposed to be placed on the free list liable to similar objections; but we have aimed to notice only those which seemed most likely to affect adversely the industrial pursuits of the country.

It is worthy of notice that notwithstanding the Secretary of the Treasury discriminates between articles which should be "taxed," and those which should be placed on the free list; yet he proposes to divide all dutiable articles into two classes, and tax all contained in each at the same rate. This mars the symmetry of his whole system. All articles, except a few of but little importance placed on the hundred per cent. list, are to pay a duty of 25 per cent. The tariff is to be lowered on some, and raised on others, without regard to the effects which may be produced upon the in-

terests of producers or consumers; and all the evils incident to disturbing the rates of duties are to be inflicted upon the country for no better reason than that the measure will "give greatly less trouble in the collection of the revenue." We must be allowed to protest against a policy which, looking to the ease and convenience of those engaged in the public service, takes no cognizance of the convenience and interests of the people. Furthermore, we must say that we cannot perceive wherein the trouble of collecting duties would be materially lessened by establishing a uniform rate.

We take no party view of this subject. We find much in the report to commend: it is our duty as journalists to express our opinion touching all subjects affecting the common welfare of the nation.—*Sen. Ed.*

TREASURY DEPARTMENT,
December 6, 1853.

The estimated receipts for the fiscal year ending June 30, 1853, were as follows:

From customs	$49,000,900 00
lands	2,000,000 00
miscellaneous sources	300,000 00
Balance in treasury July 1, 1852	14,632,136 37
	65,932,136 37
And the estimated expenditures	60,560,056 86
Estimated balance July 1, 1853	5,372,079 51

This balance to exist after applying $7,199,477 77 to the redemption of the public debt.

The actual receipts for the fiscal year ending June 30, 1853, were as follows:

From customs	$58,931,865 52
lands	1,667,084 99
miscellaneous sources	738,623 89
Making the total receipts	61,337,574 40
Add balance in treasury July 1, 1852	14,632,136 37
Total sum for the service of the fiscal year ending June 30, 1853	75,969,710 77

The actual expenditures for the fiscal year 1853 were, viz:

Civil List	$4,784,396 93
Foreign Intercourse	599,030 14
Miscellaneous	11,792,369 70

Department of the Interior		5,529,535 87
Do. of War		9,947,290 59
Do. of the Navy		10,891,639 59
Public Debt		10,482,555 39
		54,026,818 21
Balance in the treasury July 1, 1853		21,942,892 56

(As appears by the accompanying statement A.)

The estimated receipts for the fiscal year ending June 30, 1854, were as follows:

From customs		$49,000,000 00
lands		2,000,000 00
miscellaneous sources		200,000 00
Add estimated balance July 1, 1853		5,372,079 51
Total estimated sum for the fiscal year ending June 30, 1854		56,572,079 51

And the estimated expenditures were:

Balance of former appropriations	$6,879,883 28	
Permanent and indefinite approp.	9,172,829 68	
Specific appropriations asked for	30,151,040 64	
		46,203,753 60
Which would leave an estimated unexpended balance in the treasury on July 1, 1854, of		10,368,325 01

The actual receipts for the 1st quarter of the fiscal year 1854, ending September 30, 1853, were as follows, (as appears by statement B,) viz:

From customs		19,718,822 00
lands		1,489,562 05
miscellaneous sources		147,994 87
Making total receipts		21,356,378 92
To which add the actual balance in the treasury on the 1st July, 1853		21,942,892 56
Making the total sum of		43,299,271 48

The actual expenditures for the same first quarter were as follows, viz:

Civil list, foreign intercourse, and miscellaneous	4,381,091 62
Interior Department, Indians, and pensions	846,213 01
War Department	2,935,861 40
Navy Departement	3,140,129 35
Redemption of public debt	3,778,088 32
	15,081,383 70

Leaving a balance in the treasury, September 30, 1853, of		28,217,887 78
The estimated receipts for the second, third, and fourth quarters of the fiscal year ending June 30, 1854, are as follows:		
From customs		37,000,000 00
lands		3,000,000 00
miscellaneous sources		300,000 00
		40,300,000 00
To which add the balance in the treasury, September 30, 1853		28,217,887 78
Making a total sum of		68,417,887 78
The expenditures estimated by the Departments for the second, third, and fourth quarters of the fiscal year ending June 30, 1854, are as follows, viz:		
Civil list and foreign intercourse, &c		$13,570,833 54
Deficiencies in the Postoffice Department		1,895,445 63
Interior Department		2,629,350 10
War Department		12,874,817 22
Navy Department		8,135,280 67
Public debt [interest]		3,145,556 00
Do. [redemption]		15,000,000 00
Total estimated expenditures		57,251,283 16
This will leave an estimated balance in the treasury on the 1st of July, 1854, of		11,266,604 62
The balance of the appropriations for the year ending June 30, 1853, which remained unexpended on that day, and which is liable to be expended in the year ending June 30, 1854, is		17,630,758 75
The specific appropriations for the year amount to		34,051,269 58
The indefinite appropriations for the year are, as far as ascertained by actual payment, to October 1, 1853	$5,100,425 75	
As estimated for the residue of the year	6,365,526 95	
		11,465,952 70
Making the whole amount of appropriations liable to be expended in the year 1854		63,147,981 03

The estimated receipts for the fiscal year ending June 30, 1855, are as follows:

From customs	$51,000,000 00
lands	3,500,000 00
miscellaneous sources	500,000 00
Making the sum of	55,000,000 00
Add the estimated balance in the Treasury on the 1st of July, 1854	11,266,604 62
This makes the total estimated resources for the fiscal year ending June 30, 1855	66,266,604 62

The estimated expenditures for the same year is as follows:

Balance of former appropriations, which will be expended this year	$6,805,126 44
Permanent and indefinite appropriations	8,285,716 14
Specific appropriations asked for this year	35,909,434 54
	51,060,277 12

This sum is composed of the following particulars, viz:

Civil list, foreign intercourse, and miscellaneous	$12,161,436 09
Expenses of collecting revenue from customs	2,200,000 00
Expenses of collecting revenue from lands	129,900 00
Deficiency in the revenues of the Postoffice Department	2,700,000 00
Army proper, &c.	11,989,397 50
Fortifications, ordnance, arming militia, &c.	2,049 334 00
Improvements, &c	311,500 00
Indian Department	1,784,471 84
Pensions	1,876,072 95
Naval establishment, including dry docks and ocean steam mail contracts	12,712,358 74
Interest on the public debt	3,145,806 00
Making in all the sum	51,060,277 12
Leaving an estimated balance in the Treasury, July 1, 1855, of	$15,206,327 50

To be increased about ten millions by that part of the appropriation not expended within the year, and subject to any reduction that may be made in the tariff for half the year, or to any sum which may be applied to the public debt during the year.

The public debt on the 1st of July, 1852, was as follows:

Loan of 1842	$8,198,686 03
Loan of 1843	6,222,931 35
Loan of 1846	4,999,139 71
Loan of 1847	26,214,050 00

Loan of 1848	15,740,000 00
Texan idemnity	5,000,000 00
Do. not issued	5,000,000 00
	71,374,807 09
Old funded and unfunded debt	114,118 54
Treasury notes outstanding	132,161 64
Debt of corporate cities	780,000 00
	72,401,087 27

The sums paid for redemption of public debt during the fiscal year ending June 30, 1853, and the premium, &c., were as follows:

Loan of 1842	$167,485 60
Loan of 1843	4,296,862 50
Loan of 1846	68,240 00
Loan of 1747	1,668,650 00
Loan of 1848	193,300 00
Total stock redeemed	6,394,508 10

Premium on the same, $420,498 64; since which time, and up to 3d December, 1853, the public debt has been reduced to $56,336,157 52, leaving the public debt on the 3d December, 1853, as follows:

Loan of 1842	$6,872,135 54
Loan of 1843	92,800 00
Loan of 1846	4,048,400 00
Loan of 1847	20,738,700 00
Loan of 1848	14,444,491 80
Texan idemnity	4,887,000 00
Do. not issued	5,000,000 00
Debt of corporate cities	24,000 00
Old funded and unfunded debt	114,118 54
Treasury notes outstanding	114,511 64
	56,336,157 52

The accompanying table C. exhibits the time of redeeming and purchasing the public debt, and the amount of premium paid for it, from the 1st July, 1852, to the 3d December, 1853.

From this table it appears that $3,342,150 was redeemed and purchased from the 1st July, 1852, to the 4th of March, 1853, and $12,722,779 75 from the 4th of March, 1853, to the 3d of December, 1853.

Within a few days after the 4th of March, 1853, it was ascertained that the sum of $1,750,000 had been advanced by my pre-

decessor to a broker in New York, and $493,000 to a firm in Washington, for the purchase of the public debt.

These accounts have been closed in part by the transfer of the stock agreed to be purchased, and in part by replacing the money in the public treasury. There has been no loss from these transactions; but it was considered that such an advance of money to agents for the purchase of the debt was of doubtful policy, and might become hazardous, and lead to a misapplication of the public funds, and to favoritism. It was determined not to continue that method of redeeming and purchasing the public debt. Public notice was at once given that the $5,000,000 loan of 1843, bearing five per cent. interest, and redeemable on the 1st July, 1353, would be redeemed at the treasury on that day, or at an earlier period, as set out in the notice; and that interest would cease on it from and after the 1st July, 1853. The notice, marked D, accompanies this report.

The daily payments at the treasury, in discharge of the public liabilities and the redemption of said loan, did not equal the receipts. A large surplus accumulated in the treasury, and became a cause of alarm in commercial and financial circles. It was hoped that the accumulation in the treasury would exercise a beneficial restraint upon importations and speculative credit enterprises, and bring the business of the country into a safe and wholesome condition; yet, under the apprehension that a panic might arise from a too stringent operation of the treasury, it was determined to make advances to the mint for the purchase of silver for the new coinage, and to enable the mint to pay promptly and in advance of coinage for gold bullion.

The amount of money on deposit in the mint on the 4th of March was $6,098,220, and was increased by the 1st of July to $8,517,890 05, and was on the 25th of November, 1853, $11,-451,039 30. This enabled the mint to give gold, which circulated as money, for silver that was out of circulation, because of the premium upon it; and for gold bullion that could not circulate as money until coined.

It is believed that this operation tended to lessen the effect of the accumulation; but the accumulation still continuing, it was thought advisable further to lessen it by the purchase of another portion of the public debt, at the current market price, in the cities of Philadelphia and New York, as authorized by law; and an arrangement was made with a broker, at each of those places, to make such purchases, to be paid for on the assignment and delivery of the stock at the treasury. These purchases were continued until the 1st July, 1853, and ceased after that date. The amount still continuing to accumulate in the treasury, apprehensions were entertained that a contraction of discounts by the city banks of New York would result from the weekly statements required from those banks under an act of the Legislature of that State,

and, combining with the fact of the large amount in the treasury, might have an injurious influence on financial and commercial operations. With a view, therefore, to give public assurance that money would not be permitted to accumulate in the treasury, if the public debt could be had at the current market price, a public offer was made on the 30th July to redeem at the treasury, between that time and the 1st of December, the sum of $5,000,000 of the loans of 1847 and 1848, at a premium of 21 per cent., and interest from the 1st of July, 1853, on the principal. And on the 22d August another public offer was made for $2,000,000 of the loans, payable in 1856 and 1862, the former at a premium of 8½ per cent., and the latter at a premium of 16 per cent., with like interest from the 1st July, 1853. These notices, marked E and F, accompany this report. It was thought that such a public offer for the stocks, at the then current market price, would be expedient on the part of the government, and just and fair to the holders, have a beneficial effect upon the money market, and secure a larger amount of the public debt than any other mode that could be adopted. The result has been satisfactory.

The balance of the loan of the three corporate cities of the District, assumed by Congress in 1836, being $720,000, a communication was sent to the agent of the trustees of the loan, and a price agreed and accepted, to the extent of $696,000; and it is expected that the balance will be obtained, at the same price, in a short time.

An offer was also made for part of the $5,000,000 Texan bonds, bearing 5 per cent. interest, and a purchase of some of them effected, in the manner stated in the tables. The fact is established, that the public debt of each description can be obtained at the premiums offered and paid, and that the premiums may be reduced as the time fixed by the terms of the law for redemption approaches.

The balance in the treasury on the 30th of September, with the estimated receipts for the 2d, 3d, and 4th quarters of the present fiscal year, being so far in excess of the estimated expenditures for the same time, will justify the further application of $15,000,000 to the purchase of the debt, and leave a sufficient surplus in the treasury for any practical purpose. The purchase of the debt has therefore been continued, and $7,567,495 94 expended in the purchase during the 2d quarter of the year. It is considered that the present prosperous condition of the treasury, growing out of the great prosperity of all the industrial pursuits of the country, affords an opportunity to apply the surplus to the discharge of the public debt, and that it should not be left to embarrass the operation of the government in any future contingency which may require all its energies and resources.

The estimated receipts of the second, third and fourth quarters of the present fiscal year have been predicated on the present high

price of the great staples, on a good foreign demand for our surplus, and on large duty-paying importations, computed in view of the large stock of importations on hand and the stringency in the money market both here and in England, and the effect of the short crop there.

The estimated receipts for the fiscal year 1854 do not reach the actual receipts of the fiscal year 1853, although the first quarter of 1854 exceeds the corresponding quarter of the year 1853 by $5,025,207 20.

The estimated receipts for the fiscal year ending June 30, 1855, have not the results of the first quarter to veryfy them, nor the unquestioned data of good crops and high prices; but the estimate rests upon an average of preceding years, with an estimated increase proportionate to an increasing population and capacity to purchase and pay, calculated without regard to the chances of war, short crops, commercial embarrassment, or a reduction of the tariff.

The imports of the fiscal year 1853, including specie, have been $267,978,647, and the exports have been $230,452,250. A fair estimate for profits on our exports and the freight of our vessels would cast the balance of this account in our favor, without estimating the money brought in by emigrants, of which no account is taken. It is believed that a large stock of imported merchandise remains in the hands of the merchants, and for that reason, and because of the stringency in the money market, both here and in England, it is calculated that there will be, during the remaining three quarters of the year, a diminished importation, compared with that of the first quarter.

The estimate for the fiscal year 1855 has not been made to exceed that of 1853, for the reason that it is believed that the causes of diminished importations during the latter part of the fiscal year 1854 will be extended into a part of the succeeding fiscal year, and because the agitation of a reduction of the tariff will have a tendency to prevent importations beyond the actual demand for consumption.

Most articles of manufactured merchandise, like the annual productions of agriculture, are necessarily consumed within the year, and again restored by productive industry for the succeeding year; and, with a population able to pay, there is a great uniformity in the annual amount of imports and exports. There are often causes, however, which prevent a regular and progressive increase; such as short crops, low prices for exports, either at home or abroad, without the disturbing influence of war. Still it is believed that the receipts of the fiscal year 1855 will be sufficient to meet the expenditures of the year and a reasonable purchase of the public debt, and justify a reduction of the duties by adding to the free list and reducing the tax upon many other articles of importation.

The table H, accompanying this report, exhibits the foreign articles imported free of duty, and their value, for the six years from 1848 to 1853, inclusive, and also the foreign articles imported paying duty, with their value and rate of duty, for the same time.

The table I, accompanying this report, exhibits a separate list of the foreign articles which it is hereby proposed shall be added to the free list for the purpose of reducing the revenue. The revenue collected from the articles in table I, for the last year, is about $8,000,000, in which amount, it may be computed, the revenue will be reduced, by the adoption of the proposed additional free list.

This will leave the revenue larger than a proper and economical administration of the government will require; and, for the purpose of further reduction, it is now proposed to arrange the articles paying duty in two classes — the one class contained in the table K, accompanying this report, to pay what may be considered the high duty of 100 per cent., and the other class to pay the moderate duty of 25 per cent., and to include all imported articles not in the free list nor in the table K of high duties. This equalization will reduce the revenue about $4,500.000. This still leaves the revenue computed upon the imports of 1853 at about $45,-000,000 from customs, below which point it is not proposed to reduce the duties until the public debt is paid. The change now proposed in the rate of duty is designed to take effect from and after the 1st January, 1855.

The effect of making the duties 25 per cent. on all articles imported not included in the free and higher lists, will be to give greatly less trouble in the collection of the revenue, and to raise the duties on some articles and reduce them on others. When the duties are raised, the change may act in restraint of importation, and, when reduced, in their favor; and the one result, to some extent, will counteract the other. The proposed reduction, had it been applied during the last year, would leave an abundant revenue for all the reasonable wants of the government in time of peace, and allow the proper addition to the army and navy to meet the exigencies of an augmenting population and an increasing commerce, and leave the receipts from the sale of public lands to be applied to the purchase of the public debt, to which these proceeds are pledged by law.

It is not proposed to enter into any extended argument to prove that the articles in table I should be added to the free list, nor to prove the propriety of the proposed reduction of duties to the uniform standard of 25 per cent. When revenue is not needed, articles of general use for manufacturing and other purposes, not the growth or production of the United States, or but partially so, should not be taxed; and no higher taxes should be levied on other importations than may be necessary for the economical wants of

the government, thus leaving commerce as free and unrestricted as possible. Let the tariff be reduced as Congress, in view of the present wants of the government, shall deem best, the increasing population, production, industry, and enterprise of the nation will still necessarily add to the importations, and consequently to the revenue, what shall be needed for increased expenses.

The tables accompanying this report exhibit the free lists of England, France, Belgium, Portugal, Brazil, Austria, Spain, Russia, Cuba, the Zoll-Verein, Chili, Netherlands, Hanse Towns, Norway, Mexico and Sweden, and mark the progress of free trade among commercial nations. Unrestricted commerce, binding the nations of the earth in stronger bonds of peace by mutual benefits, has numerous and increasing advocates in this and other commercial countries. The principle of free trade may not yet be sufficiently verified from experience, in this and other nations, to justify its full adoption, but the progress towards free trade, now proposed, will be justified, it is believed, by both public opinion and public interest. It is considered that the taking off the duty on the raw material used in our manufactories will counteract the reduction of duties on foreign manufactures, and, when compared with the operations of the present tariff, will not materially affect the interests of domestic industry or commerce.

It is not proposed to change the principle of *ad valorem* duties, but it is for the consideration of Congress, whether a specific duty on iron, made from the average of the last three or four years' *ad valorem* duties, might not give greater stability to the iron business, and more satisfaction to consumers, and, at the same time, prove equally beneficial to the revenue.

It is proposed to make salt free of duty. The average annual revenue from that article, for the five years to 30th June, 1852, is only $232,284, while the annual fishing bounties, exclusive of the drawback on pickled fish, for which the salt duty is a pretext, amount to $289,413, besides other heavy annual expenses to prevent frauds. A report upon the subject of the fishing bounties, from J. Ross Browne, with its references, is herewith submitted. For the reasons stated in that report it is recommended that the fishing bounty be repealed, and that branch of industry be left to the fair competition which causes other maritime enterprises to flourish.

The table of imports and exports for the fiscal year ending June 30, 1853, accompanying this report, and heretofore mentioned, compares favorably with those of preceding years, and marks our increasing capacity for commercial intercourse. The table of tonnage, which also accompanies this report, shows that our tonnage is now 4,407,010 tons, and exceeds that of any preceding year by 268,000 tons. These tables prove that we enjoy a prosperous commerce, with an increasing capacity to extend it.

The table exhibiting the operations of the mint also accompanies this report. It shows the entire coinage to 31st October last to have been $370,008,192 50; the gold coinage, from the 1st of January to the 31st October of the year 1853, to have been $46,998,945 60, and the silver coinage $6,996,225, and proves an active and growing demand for gold and silver as a currency for actual use, whilst the imports of gold and silver, including what is brought to the Atlantic from California, without estimating for that brought in by emigrants, compared with the exports of gold and silver, prove that, within four years, the large amount of $135,972,095 73 has been added to the gold and silver coin remaining in the country. Should this increase continue for but a short term of years, this country will be able to dispense with banks of issue, and their attendant evils, and have the gold and silver currency contemplated by the constitution. The operations of the mint and its branches for the past year show a very favorable result, and the recoinage of silver has, in many places, removed the inconvenience arising from small bank notes and want of change. It may reasonably be expected that the supply, in the course of a few years, will be ample, and extended to every section of the country.

The following is a table of the articles proposed to be placed on the free list by she Secretary of the Treasury.

TABLE I. FREE LIST.

Acids—Benzoic, Voracic, Citric and Tartaric, Aloes, Alum, Amber, Ambergris, Alcornogue, Annato Rancor or Orleans.
Angora, Thibet, and other Goat's Hair or Mohair, manufactured.
Animals, Living.
Anniseed.
Antimony, Crude and Regulus of.
Argol or Crude Tartar.
Arrow Root.
Arsenic.
Assa foetida.
Animal Carbon, and all substances used exclusively for manures.
Bananas.
Barks used for medicines, dyeing, tanning, or other purposes.
Barytes, Sulphate of.
Barilla or Soda Ash.
Bells when old, and Bell Metal fit only to be remanufactured.
Berries, Nuts, and Vegetables. used exclusively in Dyeing or in composing Dyes: but no article shall be classed as such that has undergone any manufacture.
Berries, Flowers, and Barks.
Bismuth.
Bitter Apples.
Bleaching Powder or Chloride of Lime.
Blue or Roman Vitriol, or Sulphate of Copper.
Bolting Cloths.
Borax.
Boucha Leaves.
Books, Magazines, Periodicals, Pamphlets, and illuminated Newspapers, bound or unbound, being editions printed prior to the year 1830.
Brass in bars, pigs, plates or sheets.
Brass, when old and fit only to be remanufactured.
Brazil Paste.
Brazil Wood, Brazillette, and all other Dye Woods in stick.
Breccia.
Brimstone, unrefined or in rolls.
Bronze Liquor.
Bronze Powder.
Burgundy Pitch.
Burrstones, wrought or unwrought.
Cadmium.
Calamine.
Calomel, and other mercurial preparations.
Cameos and Mosaics and imitations thereof not set.
Camphor, crude.
Cantharides.

Table I. Free List.—Continued.

Cassia Buds.
Castorum.
Chalk.
Chronometers, box or ship, and parts thereof.
Clay, wrought and unwrought.
Cobalt.
Cochineal.
Cocoa and Cocoa Shells.
Cocoa Nuts.
Cordilla or Hemp of Tow or Flax.
Coffee, from whatever country imported.
Copper, in pigs, bars, plates or sheets.
Copper, when old and fit only to be remanufactured.
Copper, for sheathing of vessels.
Copperas or Green Vitrol, or Sulphate of Iron.
Cork Tree Bark, unmanufactured.
Cream of Tartar.
Cubebs.
Cudbear.
Diamonds, Glazier's, set or not set.
Diamonds, Gems, Pearls, Rubies, and other precious stones and imitations thereof; compositions of glass, Paste, &c., set or not set.
Dragon's Blood.
Dried Pulp.
Earthen and Stone Ware.
Emery in lump, not subrenized.
Engravings, Etchings, or Plates, bound or unbound.
Extract of Indigo.
Extract and Decoctions of.
Logwood and other Dyewoods.
Extract of Madder.
Flaxseed.
Flints.
Fruit, green, ripe, dried, pressed, or picked.
Fuller's Earth.
Furs, dressed or undressed, when on the skin.
Furs, Hatter's, dressed or undressed, not on the skin.
Gamboge.
Ginger, green, ripe, pressed, or preserved.
Gold beaters' Skins.
Gold and Silver Leaf.
Green Turtle.
Gum, Arabic.
Gum, Barbary.
Gum, East India.
Gum, Jedda.
Gum, Senegal.
Gum, substitute, or Burnt Starch.
Gum Tragacanth.
Gutta Percha, unmanufactured.
Hair of all kinds, unclean and unmanufactured.
Horns, Horn Tips, Bones, Bone Tips, and Teeth, unmanufactured.
India Rubber, in bottles, slags or sheets, unmanufactured.
India Rubber, milk of.
Indigo.
Ipecacuanha.
Iridium.
Iris, or Orris Root.
Ivory, unmanufactured.
Ivory Nuts, or Vegetable Ivory.
Jalap.
Kelp.
Kermes.
Lac Dye.
Lac Spirits.
Lastings, suitable for shoes, slippers, boots, bootees, or buttons, exclusively.
Leeches.
Lemons.
Lemon Juce.
Limes.
Lime Juce.
Linens, bleached or unbleached.
Linseed.
Liquorice Root.
Litharge.
Madder, ground, and Madder Root.
Manganese.
Manna.
Manufactures of Mohair Cloth, Silk Twist, or other manufactures of cloth suitable for manufacture of shoes, slippers, boots, bootees, or buttons, exclusively.
Maps and Charts.
Marble, in the rough, slab, or block, manufactured.
Marble, manufactures of.
Marine Coal, manufactured.
Medical Roots, Leaves, Gums and Resins, in a crude state.
Mineral Blue.
Moss, and other vegetable substances used for mattresses.
Music and Music Paper, with lines, bound or unbound.
Natron.
Nickel.
Nutgalls.
Nux Vomica.
Ochres and Ochrey, earths used in the composition of painters' colors, whether dry or ground in oil.
Oils— Palm, Cocoanut and Olive.
Olive, when pure, and not otherwise.
Opium.
Oranges.
Orange and Lemon Peel.
Orpiment.
Osier, or Willow, for basket-makers' use, prepared or unprepared.
Palm Leaf, unmanufactured.

TABLE I. FREE LIST.—Continued.

Paving Stones, Paving and Roofing Tiles and Bricks.
Patent Mordant.
Pearls, set or not set, and Mother of Pearl.
Pewter, when old, and fit only to be remanufactured.
Pineapples.
Plantains.
Polishing Stones.
Pumice and Pumice Stones.
Quicksilver.
Rags, of whatever material.
Rattans or Reeds unmanufactured.
Rhubarb.
Rotten Stone.
Red and white Lead.
Saffron and Saffron Cake.
Sago.
Sal. Ammoniac.
Salt of all kinds.
Salts, Epsom, Glauber and Rochelle.
Saltpetre or Nitrate of Soda or Potash, refined or crude.
Sarsaparilla.
Seedlac.
Shaddocks.
Sheathing Paper.
Shellac.
Silk, raw, not more advanced in manufacture than singles, train or organzine.
Seeds, namely Hempseed, Grass, Rapeseed, Mustard, Clover, Canary, Cardannum, Cammin, Caraway, Coriander, and seeds of all kinds used for Agricultural, Medicinal, Horticultural and Manufacturing purposes.
Slates and Slate Pencils.
Smalts.
Skins and Hides, raw of all kinds, whether dried, salted or pickled.
Spices of all kinds.
Sponges.
Spunk.
Squills.
Steel in bars, Cast, Shear or German.
Sugar of Lead.
Sumac.
Tallow, Marrow, and all other Grease and Soap Stock and Soap Stuffs.
Tapioca.
Tea, from whatever country imported.
Terne Tin Plates.
Terra Japonica or Catecha.
Tin Foil.
Tin, in Plates or Sheets.
Tin Plates, Galvanized.
Tin, in pigs, bars or blocks.
Tortoise and other Shells, unmanufactured.
Tumeric.
Type Metals and Old Type fit only to be remanufactured.
Vanilla Beans.
Watches and parts of Watches.
Waste or Shoddy.
Weld.
Whiting or Paris White.
Wines of all kinds, except Champagne, imitations of Wines, and adulterated Wines.
Woad and Pastel.
Woods, namely: Cedar, Lignum Vitae, Ebony, Box, Granadilla, Mahogany, Rosewood, Satin Wood, and all Cabinet Woods, unmanufactured, and Fire Wood.
Wool, costing less than 10 c. per lb.
Yarns.
Zinc, Spelter, or Tenteneque, in sheets, or pigs.

COMMERCIAL RECORD.

December 15, 1853.

Though the rivers have remained low since our last report, receipts of produce, especially of cereals, have been large for the season; and prices varying but slightly from quotations on 15th ultimo.

FLOUR. — On the 15th ult. we quoted sales superfine and extra brands at $5.75 to $6.18 per bbl. Within a day or two after, a slight decline occurred, and superfine sold on the 17th at $5.50 to $5.60 per bbl. Since then prices have remained tolerably uniform, and we now quote country superfine at $5.37½ to $5.40 p. bbl.; extra $5.62½ to $5.75 per barrel.

At *New York*—prices quoted to-day by telegraph: Ohio $6.87 to $7.00, Southern $7.00 to $7.12 per bbl; and at Liverpool, on the 3d inst.: Western Canal at 34*s* 6*d*, Ohio 35*s* 6*d* per bbls, a slight decline since the 30th ultimo.

WHEAT.—There was also a slight decline in the price of wheat in this market, about the 17th of November, but prices advanced again before the close of the month, and continued with but little variation until the present date. Sales of good red and white are reported to-day at $1.10 to $1.16 per bushel.

At *New York*, sales are reported to-day of red Pennsylvania wheat at $1.61 per bushel buoyant.

At *Liverpool*, on the 29th ult., sales of white wheat at 10*s* to 10*s* 6*d*; red and mixed 9*s* 4*d* to 9*s* 10*d*.

At *Chicago*, on the 13th inst., sales of spring wheat at 90 cts., and of prime winter at $1.05.

We have observed that the prices of wheat at St. Louis, during the season, have ruled from 5 to 10 per cent. above the prices at Chicago. This is not a new feature in the trade of these two cities. By comparing the prices of wheat at Chicago and St. Louis for each month, in 1852, we find that the average price for the year, at St. Louis, was 79.83 cents, and at Chicago 72. 75 cents per bus., and that the price at Chicago did not exceed that of St. Louis in any one month during the year except July, making the difference throughout the year within a very small fraction of 10 per cent. in favor of prices at St. Louis. Indeed, there has been but very little of the time since communication was opened between these two cities, by the canal, when the prices for wheat have not been better at St. Louis than at Chicago. In 1850, considerable quantities of flour came to this market even from Milwaukie. We have frequently taken notice of these facts, and recur to them again, for the purpose of correcting a false notion, which very generally prevails in almost every part of the United States, that not only the wheat produced in the valley of the Illinois, but a large part of that grown in the region of the Upper Mississippi is shipped to Chicago.

The South is the natural market for the breadstuffs produced on the Upper Mississippi and its tributaries, and, except in extraordinary cases, no improvement that can be made in the mode of transportation, will divert them to a northern or eastern market.

CORN.—Prices have varied but slightly during the month: sales to-day at 40 to 43 cents per bushel, sacks included. At *New-Orleans*, last advices quote old at 64 to 65 cents per bushel. At *New York*, sales to-day, yellow at 82 cents, buoyant. At *Liverpool*, November 29th, Indian corn, white, quoted at 46*s* to 46*s* 6*d* per quarter, dates of 3d inst. report sales at previous rates.

Though the price is comparatively high, there has been but little movement in corn during the present season. The high rate

of freights leaves little or no margin to dealers, and from a view of the home and foreign demand, we conclude that prices at this market must recede before any considerable movement can take place in this article.

TOBACCO and HEMP.—But little can be said of these articles at this season of the year; there is but very little of either on the market, and the high rate of freights coastwise and to Europe, is operating adversely to the interest of holders. We quote hemp at $122 to $128 per ton as in quality.

LEAD.—Receipts have been large for the season, and prices have declined slightly since our last report. Sales to-day, small lots, soft, at $6.35.

HAY. — The price of this article has ranged at about 75 cents per 100 lbs. during the month; the last advices from N. Orleans quote Timothy at $20 per tun.

HOGS & PORK.—The number slaughtered in this market has been very limited. The first slaughtered this season was a lot of 300 head, on the opposite side of the river, on the 14th November. The weather being unfavorable, the work did not commence in the city until about the 24th. The number of hogs killed, up to the present time, is supposed not to exceed 10,000 head. The ruling price has been $4.00 per hundred pounds. Higher prices have, however, been paid for the better qualities, and we believe $4.50 has been given for hogs of extra size. But $4.25 may, at this time, be regarded as the limit for the best quality.

A correct opinion cannot be formed at present as to the extent of the crop, nor in respect to the price of meats, during the ensuing year. Mess pork has declined about $1.50 per barrel in New York within the last month; sales of mess, on the 13th inst., at $13.50 per barrel. A slight decline had also taken place in England at last dates. The high price of meats for several years past has induced the planters of the South to pay more attention to their stock, and hence the demand in that quarter will be greatly reduced, and should the crop of the Ohio valley be as large as it is now believed to be, we conclude that the price of meats must rule low during the ensuing year. In this market, mess pork is quoted nominally at $10.50 to $11.00 per barrel, no sales.

CATTLE.—Prices for beef cattle have been high with little variation, during the month. Sales at $4.75 to $5.75 per 100 lbs., as in quality. The demand for California has greatly reduced the stock of the West, and comparatively high prices for beef may be expected to continue for several years.

SALT.—The stock of Ground Allum salt is said to be exhausted in market. It is quoted, however, at $2.10 per sack. Turks Island and Kenhawa in fair supply, the former at $1.45 per sack, and the latter at 68 cents per bushel.

SUGAR. — The result of the crop is not sufficiently known to authorize an opinion in respect to prices for next season. The probabilities are however in favor of moderate prices. Considerable quantities have been purchased here for the Chicago market, during the last month. Sales to-day at $3\frac{3}{4}$ to $4\frac{1}{4}$ cents. Best New Orleans offering at $4\frac{1}{4}$ to $4\frac{1}{2}$ cents per pound.

COFFEE. — There has been an advance of from one to one and a half cents per pound in this article within the last month; it is now quoted at 12 to $12\frac{1}{2}$ cents, and for strictly prime in store at $12\frac{1}{2}$ to 13 cents per pound. The following table will show that, notwithstanding the low stage of water, the receipts of produce have been liberal for the season.

Imports of leading articles at St. Louis from 16th November to 15th December, 1853, inclusive:

Flour, bbls	32,181	Salt, sacks	18,296
Wheat, sacks	147,275	" bbls	4,095
" bbls	2,161	Sugar, hogsheads	4,386
Corn, sacks	30,101	" bbls	2,045
Oats, sacks	72,635	" boxes	595
Lead, pigs	37,086	Molasses, bbls	6,325
Tobacco, hhds	20	Coffee, sacks	7,459
" boxes	553		

FREIGHTS.—At the date of our last report we quoted freight to New Orleans on flour 50 cents, pork $87\frac{1}{2}$ cents; whisky $1.00 per barrel; corn 40 cents per sack, and other descriptions of produce at 35 to 40 cents per 100 lbs. On the 16th of November an advance was obtained by the boats, and the following rates were established: flour 75 cents; pork $1.00; whisky $1.25 per barrel; corn 50 cents per sack. On the 28th November, a decline took place, and flour was taken at 60 cents; pork at 88 cents, and whisky at $1.00 per barrel. On the 5th instant a further decline took place; flour went to 50 cents; pork to 70 cents, whisky to 85 cents per barrel, and corn to 35 cents per sack. The latter may now be quoted as the ruling rates.

Coastwise freights.—The New Orleans "Price Current" of the 3d instant quotes freights to New York as follows: tobacco $8.00 to $9.50 per hogshead; pork $1.25 per barrel; wheat and corn 20 cents per bushel; lead $1.50 per ton; hemp $22.00 to $25.00 per ton.

The Money Market remains in about the same condition as at the date of our last report, and no important improvement can be expected before the opening of the spring business, though the improvement at the East will doubtless be felt by the merchants here during the winter. Sight exchange on the eastern cities continues at $\frac{1}{2}$ per cent. premium, and at par on New Orleans.

The New York banks, after contracting their loans at the rate of more than $1,000,000 a week, from the 6th of August to the 12th of November suddenly changed their stringent policy, and since that date their loans have been increasing at the rate of about $1,000,000 per week. The great influence which these banks exert over the commerce and finance of the country, makes it necessary that all merchants, and others extensively engaged in business, should observe their movements. The following weekly statement will help to explain the financial history of the current year.

Weekly Reports of the New York City Banks.

	Loans.	Specie.	Circulation.	Deposits
Feb. 26...	$95,274,376	$8,991,630	$9,274,025	$57,556,507
June 11...	95,520,656	12,174,500	9,684,106	59,073,171
Aug. 6...	97,899,617	9,746,450	9,510,465	60,994,568
Aug. 13...	95,562,277	10,654,818	9,451,945	53,166,718
Aug. 20...	93,148,396	11,092,552	9,414,636	56,817,818
Aug. 27...	92,386,053	11,319,047	9,427,191	57,431,703
Sept. 3...	91,741,338	11,268,049	9,554,294	57,502,960
Sept. 10...	91,108,347	11,380,694	9,596,316	57,545,164
Sept. 17...	90,190,589	11,860,235	9,566,723	57,612,301
Sept. 24...	90,092,765	11,340,925	9,477,541	58,312,334
Oct. 1...	90,149,540	11,231,912	9,521,665	57,968,631
Oct. 8...	89,123,998	10,286,602	9,673,458	57,985,760
Oct. 15...	87,837,273	11,330,172	9,464,714	56,068,674
Oct. 22...	85,371,981	10,303,254	9,388,543	55,748,729
Oct. 29...	83,400,321	10,866,672	9,300,350	53,335,462
Nov. 5...	83,092,630	11,771,880	9,492,158	55,500,977
Nov. 12...	82,802,409	12,823,575	9,287,629	56,201,007
Nov. 19...	83,717,622	13,691,324	9,151,443	57,446,424
Nov. 25...	84,805,530	13,349,196	9,932,769	58,672,076
Dec. 3...	85,824,756	12,830,772	9,133,586	58,435,207

The receipts of gold from California have been large since September, but the exports of the precious metals have been about equal to the receipts. In October, the exports amounted to $4,757,972, against $4,327,000 received from California. The exports in November amounted to $3,855,775, against $809,813 exported in the same month of 1852. And from the 1st to the 10th instant, the shipments of specie amounted to $2,336,580. The increase in the export of specie at this particular season is owing chiefly to the backwardness of the cotton crop in coming to

market. The accounts made up at New York, on the 15th inst., exhibiting the receipts of cotton at all the ports, from 1st of September to the latest dates, show a total of 588,733 bales, being a decrease of 526,872 bales as compared with the same time in '52, and the shipment of 228,358 bales against 466,287 bales up to same date last year. The delay of the cotton crop in going to market is attributed chiefly to the low stage of water in the southern rivers. Had the shipment of cotton been as large this season as last, it is probable that the exports of specie would by this time have ceased entirely. The crop is variously estimated from 2,800,000 to 3,000,000 bales. Belmont & Co., in their circular of 15th instant, adopt the following table of prices, according to the New York classification.

	Upland.	Florida.	Mobile.	N. O. & Texas.
Ordinary.....	7¾	7¾	7¾	7¾
Middling.....	10¼	10¼	10½	10¾
Middling fair..	11	11	11½	11¾
Fair.....	11⅜	11½	11¾	12¼

Should these prices continue until the close of the cotton season, the proceeds of the crop may be estimated at about $130,000,000, which in connection with a fair export demand for breadstuffs, and the California gold crop, show a broad basis for the business of the ensuing year. The stock market at New York is firm, with some improvement in the demand for railroad bonds &c. on foreign account, and should the war in Europe be confined to Turky and Russia, there is a fair prospect that money will be more easily obtained for the purposes of internal improvement during 1854, than it has been since the early part of the current year.

It is not to be expected, however, that money will be cheap during the incoming year. The competition between our rapidly expanding commerce, and the numerous railroad projects which have been waiting for a change in the money market, and the tendency of money, in Europe, to flow towards the seat of war, will create an active demand at high rates of interest, and prevent the effects which under a different state of facts, might be expected from an increase of the precious metals.

JOURNAL OF PUBLIC IMPROVEMENTS.

Weston and St. Louis Railroad, and North Missouri Railroad.

We learn from our exchanges that a lively interest is manifested in the western counties, north of the Missouri river, in respect to the construction of a railroad from Weston, through the river counties, to some point on the North Missouri Railroad, in Callaway county.

A spirited meeting was held at Liberty, on the 5th instant, by which the following resolutions were adopted:

"1. That we deem it practicable to build said road.

2. That Clay county will cordially co-operate with Platte, Ray, Carroll, Chariton, Howard, Boone and Callaway counties in building said road.

3. That all the counties interested in said road are hereby respectfully requested to hold county meetings, and express their views in relation to the scheme.

4. That said proposed road be designated the "Weston and St. Louis Railroad."

5. That a committee of three persons be now appointed by the chair to correspond with similar committees, if such be raised by the other counties, in reference to all the particulars connected with said improvement, and especially in reference to the designating a time and place for a general meeting of all the counties in general convention.

6. That we recommend Brunswick as a suitable as well as central point of holding said convention.

7. That the Chair appoint ten delegates to attend said convention, whenever and wherever held.

8. That a committee of five persons be now appointed to prepare an accurate account of the value of landed and other property in Clay county, as well as to ascertain as near as possible, how much individual stock will be taken in said road by citizens of Clay county."

We have long regarded the Weston and St. Louis Railroad as a legitimate branch of the Missouri system of public improvements —the only question left open being one of time. This question must be settled by the people along the route, and we shall rejoice if upon further consultation they should conclude that the time for commencing the work has arrived.

The counties through which it is proposed to build the road are rich in all the resources required for the consummation of the enterprise: productive soil, wealth, talent and moral respectability.

The project is a good one; and can certainly be accomplished in a reasonable time by a community possessing so many elements of social power.

In connexion with this subject, we beg to make a few suggestions touching the location of the North Missouri railroad. When we first proposed that project, we imagined that a railroad located on the ridge dividing the waters of the Mississippi from those flowing into the Missouri connected with plank roads as feeders, would constitute a system which would afford all the commercial and traveling facilities that would be required in the north-eastern part of the State. But we are now convinced that, instead of plankroad feeders, the line commencing at St. Charles must have from three to four branches before reaching the northern boundary of the State. First, the branch to Weston; second, one in the direction of Council Bluffs; and third, a bifurcation at a point where the eastern prong will make the shortest route to St. Paul, and the western the shortest line to Fort Desmoines.

Hence, we regard it as the true policy of the North Missouri Railroad Company to locate their road as nearly on an air line to Fort Desmoines as a reasonable regard to the character of the ground will allow. For if it should follow the dividing ridge to the State line, a shorter route will, in time, be opened to Fort Desmoines, and the ridge route will cease to subserve the purposes of a great trunk line, and become a local road with more important roads on each side of it. It is obvious that St. Louis must have a connection, by railroad, with the eastern counties of Iowa; and the nearer the North Missouri Railroad can be made to approach an air line from St. Charles to Fort Desmoines, the more certainly will it secure the business of the eastern and central portions of Iowa and Minnesota. Whether the charter authorizes the company to depart from the dividing ridge so far as to enable them to adopt an air line from St. Charles to Fort Desmoines, is a question which we have not examined. But if the charter should not give the authority, it would be better to wait until the meeting of the legislature than to commence on a system that will require to be changed before it is completed.

RAILROAD CONVENTION AT BENTON, MO.

PROCEEDINGS OF THE RAILROAD CONVENTION, HELD AT BENTON, IN SCOTT COUNTY, MISSOURI, ON THE 14TH AND 15TH OF NOVEMBER, 1853.

Monday, Nov. 14, 1853.

Pursuant to a call for a Convention, by the Committee appointed at the mass meeting in Madison county, on the 5th day of September last, addressed to the South Eastern counties of this State, and to Kentucky, Tennessee, and other Southern States, and appointing Benton, in Scott county, and the Second Monday in November, as the time and place for said Convention, the delegates from the States of Kentucky and Tennessee, and the counties of Scott, Mississippi, New Madrid and Stoddard met at the Court-House in Benton, on the 14th day of November, and Madison county, upon whose call they had assembled, being unrepresented, proceeded to organize by appointing Col. ABRAHAM HUNTER, of Scott county, President; Geo. WHITCOMB, of Mississippi county, and M. A. WILSON, of Stoddard county, Secretaries.

The call for the convention having been read the following delegates were reported present:

From Scott county:—Abraham Hunter, Felix G. Allen, A. S. Henderson, Asa Foster, Isaac Hunter, Elijah Denton, John Barnes, Chas. H. Kem, A. Waugh, Jr., Benj. Benefield, James A. Powell, P. E. Ancell, H. Winchester, Daniel Houk, Francis Hiring.

From Stoddard county:—Henry Miller, Wm. H. Whitehead, James Nations, Solomon G. Kitchen, Daniel B. Miller, Isaac Bran, M. A. Wilson.

From Mississippi county:—Noah Handy, Shelby Sheeks, B. J. Moore, J. W. Glasscock, James L. Moor, Levi H. Molder, E. D. Bigger, Geo. Whitcomb.

From New Madrid county:—Robert A. Hatcher.

From Hickman county, Ky.:—E. J. Bullock, James M. Moore, C. Brite, Robert R. Walker, John G. Ramsey, R. N. Lester.

From Fulton county, Ky.:—E. B. Fuqua, W. B. Wilson, J. D. Winter, Frank Roulhac.

From Obion county, Tenn.:—Geo. W. Gibbs, S. A. Warner.

Gen. Gibbs, of Tennessee, introduced resolutions for the consideration of the convention. After some discussion Col. Bullock, of Ky., offered a substitute for the same, pending the discussion Gen. Gibbs made a motion to adjourn to the 4th Monday in January next, which was lost—Ayes 8; Noes 31.

The substitute of Col. Bullock, and the resolutions of Gen. Gibbs were both withdrawn, and the convention adjourned to nine o'clock to-morrow morning.

Tuesday, Nov. 15th, 1853.

The Convention was called to order by the President.

Geo. Whitcomb, of Mississippi county, introduced the following resolutions, which were unanimously adopted:

Resolved, That we regard the Cairo and Fulton Road, and its extension through Texas, and to the Pacific, as being of vital importance to South Eastern Missouri, to Kentucky, Tennessee and South Eastern States, and that we believe the route from the Arkansas line, via Bloomfield, in Stoddard county, thence in nearly a direct line to Cairo, to be the best route for the same, and perfectly practicable.

Resolved, That we regard the extension of the Iron Mountain Road to the Mississippi river so as to form a connection with the Mobile and Charleston Roads, to be equally as important to the Southern States, east of the Mississippi river, by connecting them with the great mineral region of Southeast Missouri, and the hemp, tobocco, wheat and stock country of upper Missouri and Iowa, and by affording facilities to Missouri to transport her products to market without being dependent upon the high or low waters of the rivers, or impeded by the ice.

Resolved, That we believe it will be a saving of time and money, and afford additional facilities for business, to connect the Iron Mountain Road with the Cairo and Fulton Road, at the nearest practicable point, and running the same road to some point near Charleston, in Mississippi county, and from thence make a branch to connect with the Mobile road, at Columbus, and also with the Nashville road at Hickman.

Resolved, That we heartily approve of the energy displayed by the citizens of Stoddard county, in their efforts to cause surveys to be made and to secure the lands donated by Congress for making the road through their county, and would say to the other counties interested in the matter, "*go and do likewise.*"

Resolved, That we, the delegates from Stoddard, Scott and Mississippi, do pledge our respective counties, that we will make the local work through the same, and we, the delegates from Kentucky, pledge ourselves and those we represent, that we will assist the said counties in making the local work of the roads running to our respective points.

Resolved, That as Congress has donated the swamp lands in Southeast Missouri to the State, and the State having transferred the same to the counties, we do hereby recommend that the said counties grant alternate sections to the said roads upon the same terms and conditions prescribed by Congress in the grant to the Cairo and Fulton Road, believing that such grant would materially hasten the reclamation of said lands, as contemplated by the act of donation.

Resolved, That we deeply regret that the counties between here

and the Iron Mountain, and particularly the county of Madison, (upon whose call we have assembled here) have failed to meet us in convention, and we trust that hereafter they will be found with us, ready and willing to put their shoulders to the wheel and help on the great works so important both to them and to us.

Resolved, That we believe it of great importance to have a survey made from the Arkansas line, via Bloomfield, to the Mississippi river on the Cairo and Fulton route; and also to the terminus of the Mobile road at Columbus and to Hickman in Kentucky.

After an agreement among the delegates in regard to the several surveys, the following resolution, by W. B. Wilson, of Kentucky, was adopted.

Resolved, That the newspapers in the cities of St. Louis, Cape Girardeau and Little Rock, and the towns of New Madrid, Ste. Genevieve and Hickman be requested to publish our proceedings, and that copies thereof be forwarded to the Senators from Missouri, Kentucky and Tennessee, and also to the Hon. SAM. CARUTHERS, LYNN BOYD, B. E. GREY, and E. ETHRIDGE, members of Congress from Missouri, Kentucky and Tennessee.

S. A. Warner, of Tennessee, addressed the convention, stating that so far as local points were concerned he took no part, but that Tennessee was, and would be found doing her part in making the great thoroughfares of the South and West.

On motion of Col. Bullock, of Kentucky, the thanks of the convention were unanimously tendered to the President for the able and prompt discharge of his duties.

On motion of Dr. Ramsey the convention adjourned.

A. HUNTER, President.

GEO. WHITCOMB, M. A. WILSON, } Secretaries.

After the Convention adjourned a company was organized under the General Railroad Law of this State, called the "Columbia and Iron Mountain Branch of the Cairo and Futlon Railroad," to use the same track from Charleston to some suitable point of divergence to the Iron Mountain. The company was organized by choosing.

Col. A. Hunter, of Scott county, President.
E. J. Bullock, of Kentucky,
S. G. Kitchen, of Stoddard co.
Jas. Nations, of Stoddard co.
Geo. Whitcomb, of Miss. co. } Directors.
A. S. Henderson, of Scott co.
John Barnes, of Scott co.
A. Hunter, of Scott co.
Cha's. D. Cook, of Scott county, Treasurer
A. Waugh, jr., of Scott county, Secretary.

[From the Lacon Illinois Gazette.]

Fort Wayne, Lacon and Platte Valley Airline Railroad.

It is with feelings of no ordinary pleasure, that we are permitted to announce that at the meeting of the Directors of the several divisions of this great railway project, held in Lacon, on Thursday last, *contracts were entered into for the construction of the whole line, by one of the most responsible companies in the United States!*

The last week will long be remembered by the citizens of our town — remembered as a landmark in the history of our growth and prosperity. Prominent railroad gentlemen from five different States were in attendance, drawn together by the deep interest felt, east and west, in the construction of this great central highway, which is, at no distant day, to be an important link in the magnificent railroad which will stretch from the Atlantic to the Pacific ocean. Three companies were represented, each by a distinguished gentleman, to wit: Messrs. Buckingham, Love & Co., of Ohio, Bailey, Broad & Co., of Pennsylvania, and Burt & Co., of Ohio and New York—all companies of great strength and responsibility; the latter company was the successful applicants, who are to commence the work within ninety days from contract; and to be completed within the following periods, namely: From Fort Wayne to Rochester in twenty months; from Chicago and Mississippi R. R. to Illinois Central R. R. in eighteen months; and from Ills. Central R. R. to Lacon in nine months. From New Boston to the intersection of the Military Tract R. R. in twenty-four months; from the Mississippi forty miles west, and from Council Bluffs east forty miles, in twenty-four months — the Indiana and Illinois divisions to be completed in four and a half years, and the whole line in five years — the contractors to have the use of the road until completed.

The terms of the contract are regarded by men of large railroad experience, as favorable; and no doubt is entertained but that the work will be entered upon at an early day, and progress with all practicable despatch to completion. The company agree to pay to the contractors, one-third cash, one-third bonds, and one-third stock.

PACIFIC RAILROAD CONVENTION.

At a convention of a large number of delegates from the States of Pennsylvania, Ohio, Indiana, Illinois and Iowa, held pursuant to previous notice, at the Court House in Lacon, Illinois, on the 11th and 12th of November, the Hon. LOTT S. BAYLISS, of Indiana, was chosen President; G. W. Bailey, of Pennsylvania; G.

Buckingham, of Ohio; W. C. Barnet, of Indiana; Silas Ramsey, of Illinois; and Judge Jemison, of Iowa; were chosen Vice Presidents; and Thos. Tigar, of Indiana; and Wm. L. Toole, of Iowa; Secretaries.

The President, on taking the chair, announced to the convention the object for which it had convened, viz: to promote and advance the grand enterprise of constructing a Railway to the Pacific; and in some brief and eloquent remarks, urged the necessity of immediate action on the subject.

Col. Sam. R. Curtis was then called upon, and addressed the convention at much length. He advocated the Platte Valley and South Pass route; spoke of the superior advantages of this route over that of all other proposed routes, both north and south — of its centrality, nationality, and easy adaptation to a rapid and permanent construction of a railroad. The facts and reasons presented in favor of the South Pass route were conclusive and inconvertible. The address altogether was a masterly effort, combining important information, sound logic, and patriotic and eloquent sentiment.

At the conclusion of his remarks, and at the request of the convention, he read an address in favor of the South Pass route, having been previously prepared from materials and investigations made with care, and derived from authentic sources; which report appears below.

We should take pleasure in publishing the able address of Col. Curtis, but for reasons heretofore assigned we have declined all discussions on the subject of routes until the reports of the engineers appointed to make explorations shall be made known. We copy the following resolutions to show the views of the convention in regard to the mode of raising the means, and carrying on the work.

Resolved, That the peculiar geographical position and topographical features of the Platte River Valley, South Pass and great Salt Lake region, indicating it as the route for the great National Highway—the Pacific Railroad — the Federal Government should at once appropriate such pecuniary aid as would insure its immediate commencement and completion at the earliest day; and more especially so, as individuals are ready to embark in its construction if sanctioned by that spirit of liberality and national patronage that has heretofore characterized that nation which alone stands pre-eminent as the proud champion of the rights and amelioration of the condition of the human race.

Resolved, That there should be selected from all classes and all parties of men, in this Union, a devoted, distinguished and competent directory who should be incorporated with ample powers to

secure the early construction of a great National trunk Railway, which will connect the great oceans by the most central and practical route.

Resolved, That a committee of three persons from each State represented in this Convention, be appointed to correspond on this subject with such gentlemen as they believe most likely to engage in such an enterprise, and solicit their co-operation; also to induce by correspondence or otherwise, the holding of public meetings in the various cities, villages and counties interested in the Platte Valley route.—*Lacon Ill. Gazette.*

Fort Madison, West Point, Keosauqua and Bloomfield Railroad.

We learn from the *Democratic Union* that at a meeting held at Keosauqua, on the 6th instant, the following resolutions were adopted.

Resolved, That we have full confidence in the projected railroad from Fort Madison, via West Point, Keosauqua and Bloomfield, to a junction with the North Missouri Railroad; that this Road will furnish all the Railroad facilities demanded at present by the County, and we pledge ourselves to use our best exertions to secure its construction.

Resolved, That to this end we will use our influence to secure a vote of this county in favor of a county subscription of $150,000 to aid in its construction.

The County Judge of Van Buren County has issued his proclamation ordering an election to be held on the 11th day of February, 1854, for the purpose of voting on the question of subscribing $150,000 to the capital stock of said road. Such subscription to be payable in bonds having 20 years to run, and bearing interest not exceeding the rate of 7 per cent. per annum.

[From the Democrtic Union.]

DES MOINES RIVER IMPROVEMENT.—The Contract Let for the Whole Work.

For some time past, negotiations have been pending between the Board of the Des Moines River Improvement and Mr. Henry O'Reily in connection with capitalists of New York City.

We have said nothing of this before for fear it would prove a failure; but can state that the negotiations have resulted favorably, and that the Contract is made to complete the whole work from the mouth of the river to Fort Des Moines.

The improvement is to be completed on the 1st of July, 1858—four years from the 1st of July next.

The substance of the contract is as follows: He takes the lands at thirteen hundred thousand dollars. Pay the indebtedness, estimated at fifty-five thousand dollars, and is to deposit that amount with the Register, at Ottumwa, within ninety days, or forfeit the contract, has the tolls and water rents for twenty-five years, and the State can assume the control after that time by paying him the excess of the expenditure over $1,300,000.

The work is to be done according to the plans and specification heretofore adopted.

The Register is constituted trustee, and when $30,000 worth of work is done, is to give Mr. O'Reily $30,000 worth of lands less 15 per cent. retained to secure the completion of the work.

WESTERN BORDER RAILROAD.

This is the style of a road proposed to be built through the western counties of Arkansas, and designed to connect the Missouri system of railroads with that of Texas. A convention was held at Fort Smith, on the 5th instant, by which it was resolved to memorialize Congress for a grant of land in aid of this great enterprise.

It requires no argument to prove the importance of connecting the Missouri and Texas systems of public improvement, and we feel persuaded that the proposition for a grant of land in aid of this work will receive the cordial and zealous support of the entire delegation in Congress from all the States west of the Mississippi.

The resolutions adopted by the Fort Smith Convention afford abundant evidence that, though Arkansas is behind her neighbors in building railroads, she is not deficient in either spirit or intelligence. The geographical relations of Western Arkansas and Northeastern Texas will, in time, secure to that region a system of railroads which will give them all the commercial and traveling facilities that can be reasonably desired. And we are pleased to see that this fact is beginning to be understood and appreciated. Let the friends of the Western Border Railroad persevere, our sympathies are with them.

LITERARY DEPARTMENT.

Some Thoughts on Self Intellectual Culture.

BY A MEMBER OF THE KEOKUK (IOWA) BAR.

Continued from page 140.

I have thus glanced at some of the more prominent means within the reach of nearly all for improving the mind and meliorating our condition in life; and I will now proceed to present some very general views on self culture, and the proper studies to be selected. I shall endeaver to be brief.

Grandeur of character, says some one, lies wholly in force of soul — that is to say, in force of thought and moral principle ;— force of thought measures intellectual, and force of principles moral greatness. *True greatness* does not consist in, nor is it to be determined by the accidents of birth, or pecuniary, of physical or political condition, but by the development of our moral and mental nature, by the energy and clearness and compression of our thoughts, and by the entire freedom of our faculties from slavish fear, fanaticism, bigotry and superstition. We must be morally and intellectually independent before we can completely assert the dignity of our nature, and present that sublime spectacle, a truly great and good man. The individual who rises above adversity, preserves his integrity in the bosom of temptation, firmly discharges his moral obligations, and is governed by the counsels of a sound judgment and an enlightened conscience, is an honor to his country and his race. The idea of what constitutes real greatness and exaltation of character, and of its practical necessity, ought to be deeply impressed upon the heart and soul, and it will sustain and animate us through many an anxious hour of study, and shed a rich and brilliant light along our pathway, directing our journeyings, and facilitating our researches.

By self culture I mean that information which we acquire by ourselves—that education which is not obtained in schools or colleges, or through the instrumentality of regular preceptors,—but which is the result of our own earnest and unaided efforts and study. And this is unquestionably the most solid and valuable education, whether we consider it abstractly as a portion of the mind, or contemplate it in connexion with the business and happiness of life. It being wrought out by our own labor, we more thoroughly appreciate its importance.

And knowledge is not difficult of acquirement. It is within the reach of all. But it is only by a systematic apportionment of our time, that we can make any steady and solid advancement in the acquisition of knowledge. Our endeavors must be well directed, and pursued with an unconquerable perseverance. Sudden and transient and violent effort will produce no good result. The mind

must be fixed in its determinations, energetic in its labors, and patient in its investigations, if we wish success to crown our exertions. Learning cannot be had without toiling after it. We must give our days and our nights to severe and exhausting study; we must surrender the repose of indolence, and the gratification of passion, to the self devoted and ennobling efforts of educating and disciplining the intellect and heart. We must overlook the pleasures of the present, and fix the rapt eye upon the honors of the future, if we truly desire to build up the noble fabric of the mind, until it rises "before us in its native and awful majesty, in its harmonious proportions, in its mild and celestial splendor." Let this solemn truth be engraven on every heart, that labor, severe continued, exhausting labor, can alone lead to scholarship and professional distinction. There is no royal road to learning, no imperial title by which it is held. Wealth can not purchase, power cannot command it. It is the fruit of the mind's toil. It belongs to all who will seek after it. It is Heaven's high charter of man's dignity, and it will live with him throughout eternity. And one eminently beneficial result of perseverance is, that it disciplines the mind, and it accustoms it to close and accurate reasoning. It becomes strengthened by exercise, and is enabled to prosecute its labors more earnestly and successfully. Study becomes a pleasure, and the accumulation of knowledge a passion. We witness our advancement. We feel our growing power lifting us up. We are transported with the rich and varied prospects that burst upon our view, and are thus stimulated to further and profounder research. Every new scene that opens itself upon us, every new idea that flows in upon the mind, every new image that pleases the fancy, and every high achievement that summons genius into action, but bind us closer to our studies, kindle intenser the fires of our zeal, and animate us in the enlightenment and adornment of our minds. And we may rest assured that earnest study and diligence will conquer every difficulty, and prostrate every barrier. However dark and threatening may be the clouds that surround us —however thick and discouraging the adversities that encompass us—however humble and adverse our situation in life; yet if our course is marked by a resolute purpose and an untiring energy, a ray of light will soon break in upon our path, and the obstacles that threatened to overwhelm will retire at our approach, and we will go abroad into the world, respected, beloved and honored—able to the protection of our own rights, sustained by influences, and cheered on by hopes which will never fail us. We will likewise experience in the conscious dignity of our situation, and in the moral power of our character, ample compensation for the years consumed, and the sufferings undergone in the acquirement of knowledge. Though gloom and darkness may have cast their shadows over us; though friends may have deserted us in the hour of trial; though the sickness of despair may have, at times, seized

our hearts, and chilled our hopes, yet now a broad sunshine is ours, honors strew our pathway, and power follow in our train and solicit our acceptance of their gifts.

And here, it may not, perhaps, be inappropriate or useless, to present a few observations on the necessity and importance of educated mind to every portion of our country, and the successful development of its varied resources, as also upon the general nature of knowledge, its elements and acquirements. The respectability of our towns and cities, and their claims to intelligence and to the regard and respect of our country, are all more or less interested. The proportion and harmony of our architecture, as displayed in our dwellings; the taste and elegance and adaptation of our public buildings and improvements, the value and security of property as they are influenced by a lofty tone of moral sentiment and an impartial and enlightened administration of public justice, the extent and prevalence of crime, and the consequent expense arising therefrom, and the charms and endowments that cling around the social hearth; and become a portion of every refined and cultured mind, must and will, all be affected by the amount of knowledge and the purity of morals which pervade our community. The character, scholarship and usefulness of our sons, and the virtue, public regard and happiness of our daughters have all a direct and unmeasured interest at hazard. All these commingling considerations and tender attachments which constitute domestic bliss; all these thousand and grateful associations which entwine themselves around the heart, and bind us to our firesides, all those high and holy emotions and affectionate sympathies which inspire love to God and to country; all will be ennobled or degraded, elevated or depressed, sanctified or violated, as we shall embrace and cherish and bind around us the means of instruction, in morals and government and literature and religion. Let our flourishing cities neglect these essential interests, let them repulse these efforts to redeem and elevate their character in public estimation, let them frown down with contempt, or contemplate with stupid indifference the advancement and harmonization of all useful and ornamental instruction in their midst, and they may bid farewell to all permanent growth and prosperity. Wealth will seek other channels for its accumulations, genius and refinement other seats for the revelation of their immortal glories, and the arts and sciences in their application to the business and purposes of life, and manufactories and intelligent efficient labor, will no longer consent to separate themselves from the abodes of elegant learning, sound practical philosophy and enlightened enterprise. Associations to promote education, libraries to impart and diffuse knowledge, lectures to apply and illustrate the great searching truths of philosophy and government, enterprise to bring out these social elements and public opinion to develop and sustain them, are as indispenable to the true advancement of every community,

and as inseparable from their highest interests, as are population, laws, wealth and industry themselves. These are truths, great suggestive truths, demonstrated in the history, and illustrated in the experience of every growing city and town in our republic. We ought to take home these truths, and apply them to the important position we occupy in the centre of a vast commerce and agriculture, where opulence and refinement, an immense population and commerce, and machinery in all its multiplied power, and the useful arts in all their varied application, must ultimately erect and consolidate their most extensive and magnificent empire.

Let us now very briefly examine the general nature of all human knowledge, and endeavor truly to appreciate its character and its true relations to ourselves, our interests and our duties.

The diligent pursuit of knowledge, and the impartial investigation of truth, are valuable studies, interesting to all, and consistent with, and promotive of, our true and substantial happiness. They form an essential element in the perfection of our moral constitution; and their acquirement imposes a high and solemn obligation. We cannot release ourselves from it. The mind's organization is adapted to the reception of knowledge; the mind's faculties are designed to advance us in intelligence; and truth is nothing but the ascertainment of the argument, relations and fitness of things.

One of the most striking and peculiar differences existing between man and the lower orders of creation is, that the condition of the former is either retrogressive or progressive, while that of the other is stationary. Man enters this world, helpless, ignorant, and for many years incapable of self support. He advances in general intelligence, and in the arts of life, and from thence, reaching to science, literature and language, century after century rolleth past, and we find him educated, civilized and refined; the achievements of genius around him, the institutions of religion and society springing up in simple grandeur and beautiful proportion, and social influences in all their energy and sweetness weaving their soft enchantments, and pouring abroad their thousand rays of sunshine and woe and happiness.

But the brute is a mere creature of instinct. It possesses no progressive intelligence, no reasoning powers. It soon forgets its parent, pursues its instincts, goes through its routine of existence, and dies. The succeeding generation have no more of knowledge, no more of education, no more of improvement, than the preceding one. On the morning of their first creation, the sparrow constructed its nest with the same skill, and the beaver erected his dam on the same model, that the sparrow and beaver now do. The nightingale gives forth no sweeter or more melodious notes now, than when our first parents listened to its song in the garden of Paradise. And the feathered tribe wing their flight through the air; the beasts traverse the majestic solitudes of the forest; and

the fishes sport amid the cavernous depths of ocean, in the same primitive independence, and invested with the same wild and savage attributes of character they possessed thousands of years ago. Excepting man himself, so is it through the entire range of creation: Wherever we turn our eyes, or whither we direct our steps, stationary intelligence, moral irresponsibility, creation, existence, and with them the scene is closed.

Our minds ought to be thoroughly penetrated with this fact, as so strikingly illustrative of our distinguished position in the scale of created intelligence. It turns with instruction, and admonishes us that we have obligations to answer for, and important duties to discharge; it points out our relations as social beings, our mutual dependencies and our accountability to the great Creator. It, in truth, teaches us the sublime lesson of responsibility and gratitude.

We are conscious of the possession of immortal powers; we appreciate the necessity of education and its acquirement by every means within our reach and to the highest extent within our power. We would uphold and preserve sacred the venerable institutions of religion and of learning; we love the rich creations of sculpture, painting and poetry, and revel amid their exquisite tracery, delicious coloring and magnificent description. Our imaginations hallow the gorgeous pictures of romance; and the empire of genius and taste is consecrated ground; and if we desire to enjoy the blessings of a high civilization, perpetuate the treasures and glories of a useful and elegant literature, and secure solid and permanent happiness to ourselves, our children and our country, we must be diligent in the cultivation of knowledge, and establish and encourage and preserve those labors and associations so admirably designed to elevate and improve our moral and intellectual condition.

Man's progress springs from intellect and language; these constitute the great means of his advancement. Intellect enables us to judge—trace cause and effect—compare antecedent and consequent—discover and determine upon the adaptation of means to an end and accumulate knowledge and wisdom from observation and experience Oral language clothes us with power to communicate our thoughts and feelings to others, and written language to transmit to posterity all our knowledge and history, and government and philosophy and religion and civilization.

An eminent English writer very forcibly and eloquently observes: "Language, at the present moment of the world's existence, may be said to bind the whole human race of uncounted millions into one gigantic rational being, whose memory reaches to the beginning of written records, and retains imperishably the events that have occurred; where judgment, analyzing the treasures of memory, has discovered many of the sublime and unchanging laws of nature, and has built on them all the arts of life, and through

them piercing far into futurity, sees clearly events that are to come; and whose eyes and ears and observant minds are, at this moment in every corner of the earth, watching and recording new phenomena, for the purpose of still better comprehending the magnificence and beautiful order of creation, and of more worthily adorning its beneficent author." How true and sensible, and yet how beutiful and sublime the figure here presented.

Valley of the Ohio.

ITS CONQUEST AND SETTLEMENT BY AMERICANS.

BY MANN BUTLER, ESQ.,
Author of the "History of the Commonwealth of Kentucky."

Continued from page 147, vol. XI. No. 68.

LORD DUNMORE'S WAR IN 1774. BATTLE OF KENHAWA, OR POINT PLEASANT, UNDER GENERAL ANDREW LEWIS. INDIAN CHIEFS RED HAWK, SCOPPATHUS, ELLINIPISCO AND LOGAN.

The detachment under General Lewis was not as keen for peace, as either Cornstalk, or Dunmore. Nor would they stop their march, although met by a messenger from the governor, to do so. This was the last thought of the brave men, who had so gallantly penetrated into the Indian forests; they burned to avenge the depredations on the frontiers, and the blood of their fellow-soldiers in the battle of the Point.

The Indian scouts reported to the governor that Lewis' detachment, in spite of his orders, still continued their march; and the enemy began to fear that the *Long Knives*, as they called the Virginians, could not be restrained by their commander-in-chief. Upon the receipt of this intelligence, Lord Dunmore, accompanied by the Delaware chief, White Eyes, visited the Camp of Lewis, on Congo creek, near where the present town of Westfall is built, in the State of Ohio, and repeated his orders in person. They were very reluctantly obeyed, supported as they were by all the weight of the royal governor, which, at that day, was by no means small.

Never had our people enjoyed so full an opportunity of dealing an effective blow against their barbarous foes as upon the junction of the troops of Dunmore and Lewis. The latter just fresh and reinforced, after a decisive victory over the enemy; Dunmore within eighteen miles of the Indian towns on the Scioto, commanding a force when united of about two thousand men—now indeed was the time for a home stroke against a foe that had wasted the adjacent provinces with tomahawk and fire, in the most merciless manner. Yet with these outrages against the colonists unatoned

for, and the fair prospect of punishing their barbarous authors, what should have been the conduct of a governor zealous in the discharge of his official duty, can admit of little doubt. Certainly not to embrace the first offers of peace from a treacherous and unsubdued enemy; nor to postpone, on frivolous excuses, the consideration of these offers in detail, until another council, which was to be held the next year at Fort Pitt.

However, this peace gave some breathing time to our countrymen, and time has always been an element of influence in their favor. It has given us the undisputed navigation of the Mississippi, at one time denied us by Spain; the removal of the remnants of the Indian tribes, to the West of that river; the possession of Florida, Louisiana and Texas, and finally has stretched the republic from ocean to ocean.

This time of hollow and temporary peace was actively employed by the pioneers in exploring still further the vast regions of Western America. These explorations were some of them made, as we have seen before Dunmore's war, as those of Doctor Walker, Smith, Boone, Bullitt & Harrod. Another incident of singular though transitory character was the purchase made by Henderson & Co. This was a land company composed of several gentlemen of North Carolina, among whom was Col. Richard Henderson, a gentleman of high reputation in that State, and who gave his name to the company

This company employed Daniel Boone, to explore the western country for them, as is suggested by the latest and *only authentic* biographer of the unequalled woodsman.* This is asserted to have been the fact, though they would naturally have availed themselves of his familiar knowledge of the wilderness, like our own Carson, Leroux and Aubry. In the fall of 1774, Henderson, accompanied by Col. Nathaniel Hart,† visited the Cherokees.

On this visit, Col. Henderson ascertained the disposition of the Indians to part with the lands which now principally compose the south-western portions of Tennessee and Kentucky. This mission proved so far successful, as to procure a meeting of the Cherokees, at the Sycamore shoals, in the Wataga, or Wattaugah branch of the Holston river. This meeting took place, in the spring of 1775, when a number of Indians attended, and with a fairness and liberality on the part of this private land company, worthy of the most regular government, a treaty of purchase was concluded on the 17th of March, 1775. By this treaty the *Cherokee* title to the country between the Cumberland, the mountains of the same

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* Spark's Amer. Biography, new series, vol. XIII, 44. Life of Boone, by the Rev. J. M. Peck. Also: Haywood's Tennessee, 2, p. 35.

† The father of the late Nathaniel Hart, of Woodford county, Kentucky, and an uncle to Mrs. Henry Clay.

name, and the Kentucky river,* and lying south of the Ohio river, for the liberal consideration of £10,000 sterling. The title of the Cherokees had been recognized by the British officers in the treaty negotiated at Hard Labor, in 1768; and also at Lochaber, in 1770, both in South Carolina.† Thus, whatever territory west of the Kenhawa might have been acquired to the British crown, under the treaty of Fort Stanwix, in 1768, was surrendered to the Cherokees, by these treaties above alluded to. There was another treaty concluded at Watauga, which is called the *Path Deed* by Judge Haywood.‡

On the conclusion of the former treaty, by which this grand land company was established, Daniel Boone was employed by them to mark a road through the southern wilderness, by way of the Cumberland Gap to *Cantuckey*. This very item stands credited to Daniel Boone, upon the books of Henderson & Co., which have been in the author's possession.‖

These accounts seem to have been unclosed, showing a condition of no little indebtedness to the great proprietors of Transylvania by its colonists. Still this extinction of Indian title had never regularly been permitted to inure to the benefit of private persons. It had from a remote period, under the colonial government, been considered as its exclusive prerogative; and in later times, had been used by the crown only, or its representatives.

As early as 1655, Virginia enacted "that for the future no such alienations, or bargains and sales, (meaning bargains for Indian lands,) be valid without the assent of the Assembly." The same policy is manifested by an act, in 1661, declaring "that for the future *noe* Indian king, or other, shall upon any pretence alien and sell, nor *noe* English for any cause or consideration whatsoever purchase, or buy any tract or parcel of land now *claymed* or *possest* by an Indian or Indians whatsoever; all such bargains and sales hereafter made or pretended to be made, being hereby declared to be invalid, *voyd* and null." Again in 1705, the same policy is confirmed. Nor did republican Virginia abate one atom of the royal dignity and power to which she succeeded, on the vital policy of the public lands. She declared, by the twenty-first article of her first constitution of 1776, "that no purchase of lands shall be made of the Indian natives, but on behalf of the public, by authority of the General Assembly."¶

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* Cantuckey, Chenoca, or Louisa river, in the treaty here mentioned.

† In what part of that State, the author has been unable to ascertain.

‡ Civil and Political History of Tennessee, Knoxville, 1823, p. 16.

It may be amusing to note the prices of several articles in these old account books. Gunpowder was charged at $2,66 per pound, and lead at 16⅔; while labor was credited at thirty-three to fifty cents per day, for ranging, hunting or working on roads.

¶ Henning, I, 396, II, 139.

Notwithstanding this clear course of colonial legislature, on the part of Virginia, and it is believed, of North Carolina, the company in question placing some reliance upon royal support for their colony, of which they had intimations from high sources of confidence,* employed Daniel Boone, their former agent with the Cherokees, "to mark a road to Cantuckey," and erect a fort. Hitherto the access to the country had been by hunters' paths and buffalo traces. In discharging this duty, "we proceeded," says the pioneer, "with all possible expedition, until we came within fifteen miles of where Boonesborough was established, on the south side of the Kentucky river, and in the present county of Madison, in the State of Kentucky. When the party of choppers and markers had reached this distance, they were fired upon by Indians, who killed two men and wounded two others. Yet, though surprised and taken at a disadvantage, we stood our ground." On the 23d of March, 1775, the party was again attacked, and lost two more men, and had three wounded; still by the 1st of April, 1775, they began to erect the fort, which was afterwards, by a just compliment, called Boonesborough. It was situated near a salt lick, about sixty yards from the Kentucky river, on its south side. Yet it is said to have been commanded from the cliffs, on the opposite side of the river, whence a ball could reach the fort. It was not, until the 14th of June, 1775, that this *first fort* of the white man was completed in Kentucky. It was about 250 feet long, by 150 broad, and consisted of block houses and the cabins of the settlers forming part of the defences.† Slight as this advance was, in the art of war, it was more than sufficient, against attacks of small arms, in the hands of such desultory warriors, as their irregular supplies necessarily rendered the Indians. They were ever more formidable in the cane brake and the woods, than before even those imperfect fortifications.‡ "The Indians in besieging a place are seldom seen in force upon any quarter; but dispersed, and acting individually, or in small parties. They conceal themselves in the bushes or woods, or behind trees, or stumps of trees; or waylay the path, or fields, or other places, to which their enemies resort; and when one or more can be taken down, in their opinion, they fire the gun, or let fly the arrow, aimed at the mark. If necessary, they retreat, if they dare, they advance upon their killed or crippled adversary, and take his scalp, or make him prisoner, if possible. They aim to cut off the garrison supplies, by killing the cattle; and they watch the watering places for those who go for that article of primary necessity, that they may, by these means, reduce the place to their possession; or destroy its

* Lord Mansfield is said to have given the sanction of his high authority in favor of the purchase. Granville Papers, in the possession of John Seawell Jones, of Shoe co., North Carolina.

† See Hall's Sketches, I, for a plan of the fort.

‡ Mrashall's Kentucky, *1*, 42.

inhabitants in detail. In the night, they will place themselves near the fort gate, ready to sacrifice the first person who shall appear in the morning; in the day, if there be any cover, such as grass, a bush, a large clod of earth, or a stone as big as a bushel, they will avail themselves of it, to approach the first, by slipping forward on their bellies, within gun shot; and then, whosoever appears first, gets the fire, while the assailant makes his retreat behind the smoke from the gun. At other times, they approach the walls, or pallisades, with the utmost audacity, and attempt to fire them, or to beat down the gate. They often make feints to draw out the garrison on one side of the fort, and if practicable, enter it by surprise on the other." Such was the enemy who infested western country, and with whom the early adventurers had to contend. In the combat, they were brave; in defeat, they were dexterous; in victory, they were cruel. Neither sex, nor age, nor the prisoner, was exempted from their tomahawks or scalping knife. They saw their perpetual enemy taking possession of their *Hunting Ground*; to them the source of amusement, of supply, and of traffic, and they were determined to dispute it, to the utmost extent of their means. Had they possessed the skill which combines individual effort with a concerted attack: and had they directed their whole force against each of the forts, then few and feeble, in succession, instead of dissipating their strength by attacking all, at the same time; they could easily have rid Kentucky of its new inhabitants, and again have restored it to the buffalo and the Indian, the wild game and its red hunters. But it was ordered otherwise; and after inflicting great distress upon the settlers, without being able to take any of the forts, the approach of winter dispersed them; they having in the mean time killed sundry persons, and destroyed most of the cattle round the stations. Of the settlers, however, it is to be said, that they acquired fortitude and dexterity in proportion to the occasional pressure. In the most difficult times, the Indians were obliged to retire into the woods, sometimes in pursuit of game, sometimes as to a place of safety; and generally by night they withdrew, to encamp at a distance. In these intervals, the white men would plough their corn, or gather their crop, or get up their cattle, or hunt the deer, the bear or buffalo for their own food.

When traveling, they left the paths; and they frequently employed the night, to get out from, or return to, the garrison. In these excursions they often exchanged shots with the Indians; and at times, when they came to the station, found it invested."

[To be continued.]

XXXIII. CONGRESS—COMPLETE.

SENATORS HOLDING OVER AND ELECT.

Whigs in *Italic*; Democrats in Roman. Those marked F. S. are Free Soilers, or Abolitionists; U., those elected as Union men; S. R., those elected as Southern or State Rights men.

President.....David R. Atchison.
Secretary.....Asbury Dickins.

	Expires.		Expires.
ALABAMA.		MICHIGAN.	
Benj. Fitzpatrick	1855	Lewis Cass	1857
Clement C. Clay, Jr.	1859	Charles E. Stuart	1859
ARKANSAS.		MISSISSIPPI.	
Robert W. Johnson*	1855	Stephen Adams [U.]	1857
W. K. Sebastian	1859	Vacancy	1859
CONNECTICUT.		MISSOURI.	
Truman Smith	1855	David R. Atchison	1855
Isaac Toucey	1857	*Henry S. Geyer*	1857
CALIFORNIA.		NEW HAMPSHIRE.	
Wm. M. Gwin	1855	Moses Norris, Jr.	1855
John B. Weller	1857	Jared W. Williams*	1859
DELAWARE.		NEW YORK.	
James A. Bayard	1857	*W. G. Seward* [F.S.]	1855
John M. Clayton	1859	*Hamilton Fish*	1857
FLORIDA.		NEW JERSEY.	
Jackson Morton	1855	John R. Thompson	1857
Stephen R. Mallory	1857	Wm. Wright	1859
GEORGIA.		NORTH CAROLINA.	
Wm. C. Dawson	1855	*Geo. E Badger*	1855
Robert Thombs [U.]	1859	Vacancy	1859
INDIANA.		OHIO.	
John Pettit	1855	S. P. Chase [F. S.]	1855
Jesse D. Bright	1857	*Benj. F. Wade*	1857
ILLINOIS.		PENNSYLVANIA.	
James Shields	1855	*James Cooper*	1855
Stephen A. Douglas	1859	Richard Brodhead	1857
IOWA.		RHODE ISLAND.	
Augustus C. Dodge	1855	Charles T. James	1857
Geo. W. Jones	1859	Phillipp Allen	1859
KENTUCKY.		SOUTH CAROLINA.	
Archibald Dixon	1855	A. P. Butler [S. R.]	1855
John B. Thompson	1859	Josiah J. Evan	1859
LOUISIANA.		TENNESSEE.	
John Slidell	1855	*James C. Jones*	1857
J. P. Benjamin	1859	*John Bell*	1859
MAINE.		TEXAS.	
Hannibal Hamlin	1857	Thomas J. Rusk	1857
Vacancy	1859	Sam. Houston	1859

* By Governors appointment.

MASSACHUSETTS.		VERMONT.	
Chas. Sumner [F. S.]	1857	Vacancy	1855
Edward Everett	1859	*Solomon Foote*	1857
MARYLAND.		VIRGINIA.	
James E Pearce	1855	J. M. Mason [S. R.]	1857
Thomas G. Pratt	1857	R.M.T. Hunter [S. R.]	1859
WISCONSIN.			
Isaac P. Walker	1855	Henry Dodge	1857

RECAPITULATION.

Democrats	37
Whigs	21
Vacancies	4

HOUSE OF REPRESENTATIVES.

The House will consist of two hundred and thirty-four members and five territorial delegates, one new territory having been formed at the last session, viz: Washington. The Delegates, however, have no vote.

Dist.	ALABAMA.
1.	Philip Phillips.
2.	*James Abercrombie.*
3.	Sampson W. Harris.
4.	Wm. R. Smith.
5.	George S. Houston.
6.	W. R. W. Cobb.
7.	James F. Dowdell.

ARKANSAS.

1. A. B. Greenwood.
2. E. A. Warren.

CONNECTICUT.

1. James T. Pratt.
2. Colin M. Ingersoll.
3. Nathan Belcher.
4. Origen S. Seymour.

CALIFORNIA.

1. James A. McDougal.
2. Milton C Latham.

DELAWARE.

George B. Riddle.

FLORIDA.

Augustus E. Maxwell.

GEORGIA.

1. James L. Seward.
2. Alfred H. Colquitt.
3. David J. Bailey.
4. William B. W. Dent.
5. Elijah W. Chastain.
6. Junius Hillyer.
7. *David A. Reese.*
8. *Alexander H. Stephens.*

IOWA.

1. Bernhardt Henn.
2. *John P. Cook.*

INDIANA.

1. Smith Miller.
2. William H. English.
3. Cyrus L. Dunham.
4. James A. Lane.
5. *Samuel W. Parker.*
6. Thomas A. Hendricks.
7. John G. Davis.
8. Daniel Mace.
9. Norman Eddy.
10. E. M. Chamberlain.
11. Andrew J. Harlan.

ILLINOIS.

1. *E. B. Washburne.*
2. John Wentworth.
3. *J. C. Norton.*
4. *James Knox.*
5. W. A. Richardson.
6. *Richard Yates.*
7. James Allen
8. William H. Bissell.
9. Willis Allen.

KENTUCKY.

1. Linn Boyd.
2. *Benjamin E. Gray.*
3. *Pressley Ewing.*
4. James S. Chrisman.
5. *Clement S. Hill.*
6. J. M. Elliott.

7. *William Preston*
8. J. C. Breckenridge
9. *Leander M. Cox*
10. R. H. Stanton

LOUISIANA.

1. William Dunbar
2. *Theo. Hunt*
3. John E. Perkins, jr.
4. Roland Jones

MASSACHUSETTS.

1. *Zeno Scudder*
2. *Samuel L. Crocker*
3. *J. Wiley Edmonds*
4. *Samuel H. Waley*
5. *William Appleton*
6. *Charles W. Upham*
7. Nathaniel P. Banks, Jr.
8. *Tappan Wentworth*
9. Alex. De Witt [F. S.]
10. *Edward Dickinson*
11. *John G. Goodrich*

MICHIGAN.

1. David Stuart
2. David A. Noble
3. Samuel Clark
4. Hector L. Stephens

MAINE.

1. Moses McDonald
2. Samuel Mayall
3. *E. Wilder Farly*
4. *Samuel P. Benson*
5. *Israel Washburn, Jr.*
6. T. J. D. Fuller

MISSISSIPPI.

1. Daniel B. Wright
2. William S. Barry
3. O. R. Singleton
4. Wiley H. Harris
5. William Barksdale

MARYLAND.

1. *John R. Franklin*
2. Jacob Shower
3. Joshua Vansant
4. Henry May
5. Wm. T. Hamilton
6. *A. R. Sollers*

MISSOURI.

1. Thomas H. Benton
2. Alfred W. Lamb
3. *John G. Lindley*
4. *John G. Miller*
5. *Mordecai Oliver*
6. John S. Phelps
7. *Sam. Caruthers*

MINNESOTA.

Henry M. Rice

NEW YORK.

1. James Maurice
2. Thos. W. Cummings
3. Hiram Walbridge
4. Mike Walsh
5. William M. Tweed
6. John Wheeler
7. William A. Walker
8. Francis B. Cutting
9. Jared V. Peck
10. William Murray
11. T. R. Westbrook
12. Gilbert Dean
13. *Russel Sage*
14. Rufus W. Peckham
15. Charles Hughes
16. *George A. Simmons*
17. Bishop Perkins
18. Peter Rowe
19. *Ceo. W. Chase*
20. *O. B. Matteson*
21. Henry Bennett
22. *Gerritt Smith* [F. S.]
23. Caleb Lyon [Ind.]
24. Daniel T. Jones
25. *Edwin B. Morgan*
26. Andrew Oliver
27. John J. Taylor
38. George Hastings
29. *Davis Carpenter*
30. *Benjamin Pringle* [Ind.]
31. *Thomas F. Flagler*
32. *Solomon G. Haven*
33. Reuben E. Fenton

NEW JERSEY.

1. Nathan T. Stratton
2. Charles Skelton
3. Samuel Lilly
4. George Vail
5. *A. C. M. Pennington*

NEW HAMPSHIRE.

1. George W. Kittridge
2. George W Morrison
3. Harry Hubbard

NORTH CAROLINA.

1. H M Shaw
2. Thomas Ruffin
3. Wm S Ashe
4. *Sion H Rogers*
5. *John Kerr*
6. *Richard C Puryear*
7. Burton S Craige
8. Thomas L Clingman

NEW MEXICO.

Jose Manuel Gallegos

OHIO.

1. David T. Disney
2. *John Scott Harrison*
3. *Lewis D Campbell* [F.S.]
4. Matthias H. Nichols
5. Alfred P. Edgerton
6. Andrew Ellison
7. *Aaron Harlan*
8. *Moses B Corwin*
9. Frederick W Green
10. *John L Taylor*
11. Thomas Ritchie
12. Edson B Olds
13. Wm D Lindsay
14. Harvey H Johnson
15. *W R Sapp*
16. *Edward Ball*
17. Wilson Shannon
18. George Bliss
19. *Edward Wade* [F. S.]
20. *Jos R Giddings* [F. S.]
21. Andrew Stuart

OREGON.

Joseph Lane

PENNSYLVANIA.

1. Thomas B Florence
2. *Joseph R Chandler*
3. John Robbins, Jr
4. Wm H Witte
5. John McNair
6. *William Everhart*
7. Samuel A Bridges
8. Henry A Muhlenberg
9. *Isaac E Heister*
10. *Ner Middleswarth*
11. Christian M Straub
12. H B Wright
13. Asa Packer
14. Galusha A Crow
15. James Gamble
16. William H Kurtz
17. *Samuel L Russell*
18. *John McCulloch*
19. Augustus Drum
20. John L Dawson
21. *David Ritchie*
22. *Thomas M Howe*
23. Michael C Trout
24. Canton B Curtis
25. *John Dick*

RHODE ISLAND.

1. Thomas Davis
2. Benjamin B Thurston

SOUTH CAROLINA.

1. John McQuinn [S R]
2. Wm Aiken [S R]
3. L M Keitt [S R]
4. Prest S Brooks [S R]
5. James L Orr [S R]
6. W W Boyce [S R]

TENNESSEE.

1. Brookins Campbell
2. Wm M Churchwell
3. Samuel A Smith
4. *William Cullum*
5. *Chas Ready*
6. Geo W Jones
7. *R M Bugg*
8. *Felix K Zollicoffer*
9. *Emerson Etheridge*
10. Frederick P Stanton

TEXAS.

1. George W Smyth
2. Peter H Bell

UTAH.

John M Bernhissel

VIRGINIA.

1. Thomas H Bayly
2. J S Milson
3. John S Kaskie
4. Wm O Goode
5. Thomas S Bocock
6. Paulus Powell
7. William Smith
8. Charles J Faulkner
9. H A Edmonson
10. John Letcher
11. Z Kidwell
12. John F Snodgrass
13. Fayette McMullen

VERMONT.

1. *James Meacham*
2. *Andrew Tracy*
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3. John B Macy

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Civilian

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VOL. XI.—O. S. 5, N. S. DECEMBER, 1853. NO. 3.

TABLE OF CONTENTS.

ARTICLES.

ART. PAGE.

I.—SOCIAL AND COMMERCIAL ASPECTS. By the SENIOR EDITOR 157

II.—NEW PLAN OF CONSTRUCTING RAILROADS. By A. P. ROBINSON, Chief Engineer Louisville & Covington R. R..... 163

III.—ADDRESS OF URIEL WRIGHT BEFORE THE FIRST STATE AGRICULTURAL FAIR IN MISSOURI..... 173

IV.—IRON MINES AND IRON TRADE OF OHIO AND CINCINNATI. Number of Furnaces and Iron Works. Quantity of Pig Iron, Castings and Wrought Iron produced. Number of operatives employed, &c..... 182

V.—JUVENILE REFORM SCHOOLS. Petition to Congress for a donation of land. By the SENIOR EDITOR..... 186

VI.—NATIONAL FINANCE: REPORT OF THE SECRETARY OF THE TREASURY. Review and observations touching the Free List, &c. By the SENIOR EDITOR..... 189

COMMERCIAL RECORD.

Monthly Review of the Markets. Prices of Leading Articles of Produce and Groceries at St. Louis, New Orleans, New York and England. Imports of Leading Articles at St. Louis. Freight, River and Coastwise. Cotton Trade. Receipts and Exports of Gold. Weekly Report of the New York City Banks, from August 6th to December 3d, 1853. Prospects for the incoming year, &c. By the SENIOR EDITOR..... 204

JOURNAL OF PUBLIC IMPROVEMENT.

WESTON AND ST. LOUIS RAILROAD, AND NORTH MISSOURI RAILROAD. Resolutions adopted by the meeting at Liberty, Mo. Remarks touching the location of the North Missouri Railroad..... 210

RAILROAD CONVENTION AT BENTON, Mo. Resolutions, &c. 212

FORT WAYNE, LACON AND PLATTE VALLEY AIRLINE RAILROAD. Contract for building the road, &c..... 215

PACIFIC RAILROAD CONVENTION AT LACON, ILL. Address of Col. S. R. Curtis, Resolutions, &c..... 215

FORT MADISON, WEST POINT, KEOSAUQUA AND BLOOMFIELD RAILROAD. Meeting and Resolutions at Keosauqua. 217

DESMOINES RIVER IMPROVEMENT. Contract for completing the work..... 217

WESTERN BORDER RAILROAD. Convention at Fort Smith..... 218

LITERARY DEPARTMENT.

SOME THOUGHTS ON SELF INTELLECTUAL CULTURE. By a Member of the Keokuk (Iowa) Bar..... 219

VALLEY OF THE OHIO. Its conquest and settlement by Americans. Lord Dunmore's war in 1774. Battle of Kenhawa, or Point Pleasant, under Gen. Andrew Lewis. Indian chiefs Red Hawk, Scoppathus, Ellinipisco and Logan. By MANN BUTLER, Esq.,. 224

THIRTY-THIRD CONGRESS..... 229

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New Warehouse, No. 63 Second street, between Olive and Locust streets, St. Louis, Mo.

Slate Yard.

JOHN M. CANNON, Slater, No. 16 and 17 South Sixth street, St. Louis, would respectfully inform the public that, having now completed his arrangements, he is prepared to make contracts for any work in his line. He has in his employ practical slaters, and is well prepared to execute in a workmanlike manner, and with dispatch, all orders entrusted to his care. He keeps constantly on hand, and for sale, Welch slate, rich tiles, sheet lead, slate flagging, slate hearths, copper, brass and iron slating nails, Rosendale cement, and all other articles pertaining to his business. He will strip from roofs zinc, sheet iron, tin, or other covering, and substitute therefor slate. Slate removed from one roof, can be used to advantage on another, which is not the case with any other roofing material. His terms are such as cannot but prove satisfactory. Apply as above.

Paper Hangings.

WOLF & ENGERT, Importers and dealers in Paper Hangings, Colors and Fancy Papers, No. 49 South Second street, between Elm and Myrtle, St. Louis, Mo. Constantly on hand, all kinds of oil and water colors, paper-hangings, chimney screens, lester pieces, window shades, marble, marroquin, Gold and Silver paper, painters' and Dutch gold bronze, lead pencils, paint boxes, paint brushes, drawing paper, &c. April, 1850

Washington Steam Sash Factory.

B. PHILIBERT,

WASHINGTON Avenue and 14th street, south side St. Louis, Mo., makes Sash, Doors and Blinds. Also Door and Window Frames. Terms moderate N. B.—Sitting and Planing, done here.

Banking Houses.

PAGE & BACON, Banking House No. 120 Main street, St. Louis, next door to the Bank of Missouri.

N. B. Deposits received, Drafts and Notes from all parts of the Union collected and Exchange on the East and South for sale at all times.

Also Branches of Exchange and Banking Houses at San Francisco and Sacramento Cities, California.

I. A. BENOIST & CO., bankers and exchange dealers, No. 63 Main street, east side third door north of Olive street, St. Louis, Mo. Interest paid to depositors, drafts and notes collected, sight and time bills purchased, and sight exchange on the eastern cities and New Orleans for sale, at the lowest rates, in sums to suit purchasers.

JOHN J. ANDERSON & CO., bankers and exchange dealers on the north west corner of Main and Olive streets, St. Louis, Mo. Interests paid to depositors, drafts and notes collected, sight and time bills purchased and exchange on the eastern cities and New Orleans for sale at the lowest rates.

LOKER, RENICK & CO., bankers and exchange dealers, No. 132 Main street, west side, third door north of Vine street, St. Louis, Mo. Interest paid to depositors, drafts and notes collected, sight and time bills purchased and sight exchange on the eastern cities and New Orleans for sale at the lowest rates in sums to suit purchasers.

LUCAS & SIMONDS, Bankers and Exchange dealers, Corner of Main and Chestnut Streets, St. Louis, Mo.

Drugs.

CHARLESS, BLOW & CO., Importers and Wholesale Dealers in Drugs, Paints, White Lead, Oils, Window Glass, Glassware, Perfumery, &c., Nos. 70 and 72 Main Street, St. Louis, Mo.—☞N. B. Ginseng and Beeswax bought at highest market rates.

St. Louis Cotton Factory.

ADOLPHUS MEIER & CO., Manufacturers of St. Louis Cotton Yarn, &c., Importers and Dealers in HARDWARE and CUTLERY, No. 22, corner of Main & Chestnut Streets, St. Louis, Mo.

Hats & Caps.

H. & R. R. WHITEMORE & CO., wholesale dealers in Hats, Caps, Bonnets and Straw Goods, No. 143 Main str., St. Louis, Mo. ☞Cash paid for Furs and Deer Skins.

Dry Goods.

CROW, McCREERY & CO., Wholesale dealers in Dry Goods, No. 71 Main street, St. Louis, Mo. Wayman Crow, Phocron R. McCreery, Wm. H. Barksdale, Wm. A. Hargadine, Charles D. Appleton.

WOODS, CHRISTY & CO., wholesale dealers in Dry Goods, No. 75 Main street, St. Louis, Mo. James Woods, William T. Christy, James C. Christy, Robert K. Woods.

CHOUTEAU, HARRISON & VALLE, Commission Merchants and Proprietors of the St. Louis Rolling Mill. Manufacturers, from the ore of the Iron Mountain, of Bar Iron in all its various shapes, Sheet Iron and Boiler Plate, Nails, Spikes, &c., &c.
Warehouse No. 148 North 2d street, St. Louis

Watches and Jewelry.

C. D. SULLIVAN & CO.,

JEWELLERS, Watch and Clock Makers, No. 39 Fourth Street, opposite the Planter's House. A large and well selected assortment of Clocks, Watches, Jewelry and Silver Spoons constantly on hand and for sale low. All kinds of Jewelry made to order and neatly repaired. Engraving neatly executed. The highest price paid for old Gold and Silver. All orders punctually attended to.
March 1850.

PACIFIC RAILROAD.

Winter Arrangement.

On and after the 20th of October, or until further notice, trains will run regularly Every Day, including Sundays, connecting at Meramec with F. Bartold's Stages to Manchester and Ellisville, and at Franklin with Sanger & Co.'s stages to Jefferson City, and Washington, Mo., as follows, to wit:

ST. LOUIS TO FRANKLIN.

Leave St. Louis at	9 30	A. M.
do. do.	4 00	P. M.
Arrive at Franklin at	11 15	A. M.
do. do.	6 05	P. M.

FRANKLIN TO ST. LOUIS.

Leave Franklin at	7 00	A. M.
do. do. do.	1 00	P. M.
Arrive at St. Louis at	8 45	A. M.
do. do. do.	2 45	P. M.

The above trains stop at all the way Stations.

Omnibusses leave the Planters' House, on Fourth street, half an hour in advance of every train, and run regularly in connection to and from all the trains.

Passengers are particularly requested to purchase tickets of the Agents, at each end of the line, before taking seat in the Cars. Extra charge for tickets purchased in the cars.

U. S. MAIL.—Sanger & Co. will run a daily line of four horse Post Coaches as follows: Leaving Franklin in connection with the 9 30 A. M. train from St. Louis. They will run coaches to Jefferson City, and thence westward and south-westward. They will also run a line of four horse Post Coaches, via Union, to Washington. Time to Washington, from St. Louis, 7 hours; to Jefferson City, 30 hours.

Tickets to be procured of Sanger & Co., at their office, under the Planters' House, Fourth street or at the Depot of the Railroad, on Fourteenth street.

JAMES M. WARD, Ass't Sup't.
Office P. R. R. Depot, Fourteenth street.